

LIBRARY

CLASS NO.....

BOOK NO.

ACCESSION NO....

2PPDelbi-5,000-3-8-51-GIBPS

INDIAN ECONOMICS

(A General Survey of Indian Economic Problems)

BY

K. P. SIPAHI MALANI M.A.

Department of Economics, Benares himsa University, Sometimes Fellow of D J Sind College, Karachi

AND

H. R. SONI MA, D SC (LONDON)

Department of Economics, Beneres Hindu University, Author of "Indian Industry and its Problems"

BENARES
NAND KISHORE AND BROS.
1936.

Published by
MR NAND KISHORI
of
Nand Kishore & Bros,
Benares

Printer P C Roy, SRI GOURANGA PRISS, 5 & 6, (bintamani Das Lane, Calculta

To The Members of our Common-room In memory of many entertaining and instructive talks.

PREFACE.

A word may be said about the title of the book. Indian Economics is an unsatisfactory expression but it has acquired in India a local currency which makes it equivalent to Indian Economic Problems. As the book is intended primarily for the Indian student, we have reluctantly accepted the title which is in current use.

Another word may be said shout adding one more to the many existing books on Indian Economics. Our reason for doing so is that there does not exist at present a satisfactory book in one volume which deals with all the problems in a simple and straightforward fashion. Too many details confound the main issue for the young student; and a piling up of quotations from different authorities, without arriving at any definite conclusion, does not help him to grasp the issue. And in addition we are convinced that our varied and difficult economic problems, which are closely inter-connected, can be only tackled by a planned economy which sets itself a definite and clear cut goal and adopts adequate measures for the purpose. Lassarz faire and a dependence on individual initiative have led us into a bline.

have led us into a bline agriculture and our inde has annihilated distance well directed resources of economy—whose founds

condition of our lodern transport organized and present Indian i illiteracy and

ill-health, emasculating social and rengious institutions, poor enterprize, inadequate capital resources, inefficient labour, low business morality, primitive technique, inefficient organization, and above all the absence of a national government which could command the confidence and co-operation of the people—is not a match and cannot possibly be a match. Nobody can foresee any reasonable period in which these heavy handicaps will be removed; and our only other alternative is a planned economy which will relieve us immediately of at least some of our dis-

advantages. And the changed environment which must result from a planned economy will be most helpful in fighting our socio-economic difficulties. It is from this point of view that the present book has been written.

We must acknowledge our obligations to many previous writers who have either discussed our economic problems in general or have concentrated on a particular problem. One who has been reading up the literature on the subject and teaching it for a number of years will find it rather difficult to say categorically whether a particular idea or even manner of expression is his own or he has unconsciously adopted it in the course of his reading. Our position is the same. We are greatly indebted to previous writers and gratefully acknowledge our obligations. Any originality which the present volume may have is not due to any new collection of facts or figures. We have only considered the Indian economic problems from the point of view of planned economy, which alone presents an integral solution and to which we attach the greatest importance.

Benares Hindu University, 1st Nov. 1936.

K. P. S. M. H. R. S

CONTENTS.

- Chapter I. The Natural Resources of India. 1. The Importance of Natural Resources. 2. Area, Population and Geographical Location. 3. The Natural Divisions of India. 4. Climate. 5. Rainfall. 6. Seasons. 7. The Soils. Alluvial Soil. 8. Black Cotton Soil. 9. The Red Soils. 10. The Laterite Soils. 11. Mineral Resources I. Metalliferous Minerals. 12. II. Nou-metalliferous Minerals. 13. Mineral Resources. A General Review. 14. Forests. 15. Flora and Fauna. 16. Transport. 17. The Sources of Power. 18. Conclusion.
- Chapter II. The Economic Consequences of our Social and Religious Institutions.

 1. The Importance of the subject.

 2. The Caste System.

 3. The Advantages of the Caste System.

 5. The Present Position of the Caste System.

 6. The Joint Family System.

 7. The Advantages of the Joint Family System.

 8. The Disadvantages of the Joint Family System.

 9. The Present Position of the Joint Family System.

 9. The Present Position of the Joint Family System.

 10. The Laws of Inheritance and Succession.

 11. Ceremonial Expenditure.

 12. Indian Spirituality and Other-worldliness and its connection with India's economic backwardness.

 13. Indian Fatalism.

 15. The Importance of the subject.

 16. The Joint Family System.

 17. The Joint Family System.

 18. The Disadvantages of the Joint Family System.

 19. The Present Position of the Joint Family System.

 10. The Joint Family System.

 11. Ceremonial Expenditure.

 12. Indian Spirituality and Other-worldliness and its connection with India's economic backwardness.

 13. Indian Fatalism.
- Chapter III. The Problem of Population. 1. Total Population and Density. 2. The Provincial Distribution of Population. 3. Distribution of Population according to Religion. 4. Rural and Urban Distribution. 5. Distribution of Population according to Workers and Dependents. 6. Distribution of Population according to Age. 8. Distribution of Population according to Sex.

9. Distribution of Population according to Sex in Urban Areas. 10. Indian Birth Rate and Death Rate. 11. Infant Death Rate. 12. Female Mortality at the Reproductive Ages. 13. Expectation of Life. 14. Public Health and Malnutrition. 15. The Marriage Rate. 16. Fertility. 17. Size of Families by Occupation of Husband. 18. Overpopulation. 19. Remedies for Overpopulation. 20. Emigration. 21. Inter-Provincial Migration. 22. Increase in Production of Wealth. 23. Birth-Control. 24. Contraception: the case for it. 25. Contraception: the case against it. 26. Progress in Birth Conthol in India. 27. Fugenic Legislation. 28. Summary. 29. Conclusion. pp. 30—64.

Chapter IV. The Economic Transition in India. 1. The Importance of the Industrial Revolution. 2. The Industrial Revolution as the basis of the economic classification of different countries. 3. The Characteristics of the Old and the New Economic Orders. 4. The Old Economic Order in India. 5. The Village Organization under the Old Order. 6. Towns under the Old Orders. 7. Industries under the Old Orders. 8. The Decay of Indian Industry: A. The Influence of Foreign Rule o. B. The Consequences of the Industrial Revolution in England on Indian Industry. 10. The Contrast between the result of the Industrial Revolution in England and India. 11. The Village in Transition: The Causes. 12. The Village in Transition: I. The Effects on Agriculture. 13. II. The Effects on Handicrafts. 14. The Beginnings of Modern Industry. 15. The Progress of Industry, 16. Towns in India. . pp. 65—85. . .

Chapter V. Agriculture: General Survey of Principal Crops and Exports. 1. The Place of Agriculture in Indian Economy. 2. Agricultural Statistics of British India. 3. An Analysis of the Statistics. 4. The Principal Crops: The Major Food Crops. 5. The Minor Food Crops. 6. Non-Food Crops: Tea and Coffee. 7. Coffee. 8. Fibres: Cotton and Jute. 9. Jute. 10. Oilseeds.

- Indigo. 12. Opium. 13. Tobacco. 14. Fodder C10ps.
 Rubber. 16. The Low Yield of Agriculture. 17. Exports of Agricultural Produce. 18. Deterioration of Soil. pp. 86—103.
- Chapter VI. Agriculture: The Problems of Land. 1. Subdivision and Fragmentation of Holdings. 2 The Extent of Subdivision and Fragmentation. 3 The Causes of Subdivision and Fragmentation. 4. The Evil Consequences of Subdivision and Fragmentation. 5. The Remedies for Subdivision and Fragmentation adopted in other countries. 6. Remedial Measures in India. 7. The Place and Problems of Irrigation 8. Productive and Unproductive Works o. Extent. Revenue and Produce. 10. The Irrigation Policy of Government. 11. New Irrigation Works. 12. Irrigation versus Railways. 13. Some Evil Consequences of Canal Irrigation. 14. Wells. 15. Tanks. 16. Permanent Improvements on Land. pp. 104-121.

Chapter VII. Agriculture: The State and Land Tenures.

I. THE STATE IN RELATION TO AGRICULTURE. 1, Historical Survey. 2. The Handicaps of Agricultural Departments. 3. Other State Help. 4. Rural Uplift. 5. Royal Commission on Agriculture. 6. Imperial Council of Agricultural Research. II. LAND TENURES. 7. Historical Background of Land Revenue. 8. Three Main Types of Land Tenure. 9. Two Main Types of Village Constitution, 10. Sub-Proprietary Rights. 11. Tenant Rights in Zemindari Tracts. 12. Characteristics of Occupancy Privilege. 13. Tenant Rights in Ryatwari Tracts. 14. Settlement. 15. Different Kinds of Settlements. 16. Zemindari Settlement and Permanent 17. Mahalwari Settlement. 18. Ryatwari Settlement. 19. Is Land Revenue a Tax or Rent? Settlement. 20. Permanent versus Temporary Settlement. 21. A Solution of the Problem. 22. The Term of Settlement and the Principles of Assessment. 23. Recommendations of the Taxation Enquiry Committee. 24. Land Revenue and the Principles of Taxation. 25. Land Revenue and the Principle of Justice. 26 Land Revenue and Executive Control. 27. Retrospect 28. Prospect. . . pp. 122—155.

- Chapter IX. Rural Indebtedness, I. GENERAL SURVEY, 1. The Serious Problem of Rural Indebtedness. 2 The Extent of Rural Indebtedness. 3. The Causes of Rural Indebtedness. 4. The Moneylender: the case against him. 5. The Pathan Moneylender, 6. The Moneylender the case for him. 7. Official Measures against Rural Indebtedness. 8. Restrictions on Land Alienation. o. Provision and Maintenance of Credit. II. RECENT LEGISLATION. 10. The Raison d'etre of Recent Legislation. 11. Debt Conciliation in the Central Provinces. 12. The Working of the Conciliation Boards. 13. The Punjab Relief of Indebtedness Act. 14. The United Provinces Acts, 1934. 15. The Agriculturists' Relief Act. 16. The Encumbered Estates Act. 17. Regulation of Execution Act. 19. Usurious Loan (United Provinces) Amendment Act of 1934. . Pp. 179-199.
- Chapter X. The Co-operative Movement in India. 1. The Aims and Objects of Co-operation. 2. Co-operation in Other Countries. 3. Co-operation in India and the State. 4. The Co-operation Credit Societies Act of 1904. 5. The Co-operative Societies Act of 1912. 6. Other Landmarks in the Co-operative Movement. 7. Co-operative Credit. 8. Primary Agricultural Societies. 9. The Working Capital. 10. The Object of Loans. 11. Interest, Management

and Audit. 12. Overdues of Primary Agricultural Societies. 13. Primary Non-Agricultural Societies. 14. Central Financing Agencies, 15, Unions, 16. Central Banks. 17. The Working of Central Banks, 18 Provincial Banks 19. All India Co-operative Apex Bank. 20. Land Mortgage Banks. 21. The Working of Land Mortgage Banks. 22. Other Types of Co-operation. 23. Co-operative Marketing. 24. Co-operative Consolidation of Land Holdings. 25. Co-operative Irrigation and Land Reclamation 26. Cooperative Consumers' Societies. 27. Better Living Societies. 28. Co-operative Housing Societies. 29. Co-operative Educational Societies. 30. Industrial Societies. 31. Other Co-operative Societies. 32. An Estimate of the Co-operative Movement. 33. The Present Extent of Co-operation. 34. The Handicaps of the Movement. 35. The Weaknesses of the Movement. 36. The Achievements of the Movement. 37. The Potential Contribution of the Co-operative Movement 1)1). 200-237.

Chapter XI. Cottage Industries. 1. The Decline of Handicrafts: its Causes. 2. The Present Position of Handicrafts. 3. The Organization of Cottage Industries. 4. The Causes of Survival. 5. The Case for the Development of Handicrafts. 6. Scope for the Development of Handicrafts. 7. Means and Methods of Improvement. 101. 238-248.

Chapter XII. Organized Industries. I. INTRODUCTORY 1. The Late Development of the Factory System. 2. The Beginning and Progress of Modern Industrialism. 3. The Extent of Organized Industries. II. BASIC INDUSTRIES. 4. The Meaning of the term "Basic Industries." 5. Iron and Steel Industry. 6. Iron and Steel Duties Act, 1934. 7. Future of the Steel Industry. 8. The Coal-Mining Industry. 9. Hydro-Electric Power Generation. 10. Non-ferrous Metals. 11. Heavy Chemicals. 12. Engineering Industries. 13. Vegetable Oils. 14. Leather Tanning. 15. A Review of the Present Position and Prospects of Basic Industries.

Chapter XIII. Organized Industries (Continued). III. Non-Basic Industries. 1. The Cotton-mill Industry. 2. Indo-Japanese and Indo-British Textile Agreements. 3. The Woolen Industry. 4. The Silk Industry. 5. The Jute-mill Industry. 6. Paper Manufacture. 7. The Cement Industry. 8. Glass Manufacture. 9. The Match Industry. 10. The Sugar Industry. 11. Other Manufacturing Industries. 12. The Present Condition of Manufacturing Industries Reviewed. 13. The Causes of Slow Progress.

pp. 277-305.

Chapter XIV. Factors in Industrial Development. I. RAW MATERIALS. 1. The Development of Industries in relation to the Supply of Raw Materials. II. POWER SUPPLY. z. The Importance of Electricity as a Source of Heat and and Methods of Electrification. Power. 3. Means 4. Necessity of Electrification of Industry in India. 5. The Peculiarities of the Indian Problem. 6. The Water Power 8. The State and Power 7. The Coal Zone. Development, III. FINANCE AND MANAGEMENT, o. The Importance and Scope of the Subject. 10. The Amount of Capital Invested in Industries. 11. Causes of the Supre-12. Amount of Capital macy of Foreign Capital. Available for Industrial Development. 13. The Present Difficulties of Raising Capital for Industrial Enterprises. 14. Defective Management and the Managing Agency System. 15. Remedies. 16. Methods of State Intervention in Finance and Management. 17. The Constitution of Industrial Banks. 18. The Employment of Foreign Capital 19. Disadvantages of the Employment of Foreign Capital by Foreigners themselves. 20. Some Supposed Advantages. 21. Different Degrees of Disadvantages. 22. Prevention or Control? 23. The Meaning and Scope of State Action. 24. Industrial Policy of the East India Company. Laissez-faire Policy under the Crown. 26. Change in Government's Attitude towards Industrial Development. 27. Industrial Policy during the War. 28. The Appointment and Report of the Industrial Commission. 20. The Chapter XV. Labour in Organized Industries. 1. The Scope and Importance of the Subject. 2. Indian Factory Labour: its Growing Importance. 3. Industrial Labour: its estimated strength and migratory character. 4. Sources of Labour Supply. 5. Methods of Recruitment. 6. Foreman Class and its Recruitment. 7. Mental equipment of Indian Factory Workers. 8. Standard of Living. 9. Housing in Industrial Areas. 10. Conditions of Work. 11. Hours of Work. 12. Scale and Methods of Remuneration in Industry. 13. Fines and Delays in the Payment of Wages. 14. Welfare Work. 15. The Trade Union Movement. 16. Efficiency of Labour. Causes and Effects. Remedies. 19. The Vicious Circle.

PP: 349-379.

Chapter XVI. Transport. I. Introductory. 1. Social and Economic Importance of Transport. 2. The Requisites of an Efficient System of Transport. 3. Different Means of Transport and their Co-ordination. II. ROADS AND ROAD TRANSPORT. 4. The Development of Roads in India A Historical Survey. 5. Indian Roads at Present. 6. Road Transport. 7. Consequences of the Inadequacy of Road Construction Policy during Recent Years. 9. The Recommendations of Road Development Committee. 10. Results of New Road Policy. 11. The Problem and its Solution. 12. Improvements in the Means of Road Transport. 11. Railways. 13. Pre-War Development in India. 14. Railways during and after the War. 15. Investments

and Returns on Capital. 16. The Consequences of Railway Development. 17. Scope for Further Development. 18. Railway Management and Control. 19. Administration of Railway Finance. 20. Recent Tendencies in Railway Finance. 21. The Rates Policy. 22. State versus Company Management. 23. Railways under the New Constitution. 24. Rail-Road Co-ordination. IV. INLAND WATERWAYS. 25. Varieties and Advantages of Inland Waterway Transport. 26. Possibilities of Inland Waterways. 27. Irrigation versus Navigation. V. COASTAL AND OCEANIC SHIP-PING. 28. The Present Position of Inland Shipping and its Possibilities. 29. Causes of Backwardness. 30. The Appointment of the Mercantile Marine Committee. 31. Attitude of the Government. 32. Bills for the Reservation of Coastal Traffic and the Abolition of Deferred Rehates. pp. 380-417.

Chapter XVII. Currency and Exchange. I. THE EVOLUTION OF THE GOLD EXCHANGE STANDARD. 1. The Introduction of Silver Monometallism and Standardization of Coinage. 2. The Demonetization of Gold. 3. Movement in Favour Return to Gold. 4. The Mansfield Commission. 5. Decline in the Value of Silver. 6. Effects of Silver Slump on India. 7. Agitation against the Silver Standard. 8. International Bimetallism. o. The Herschell Committee, 10. The Report of the Herschell Committee. 11. Recommendations of the Herschell Committee, 12. The Demonetization of Silver and the Evolution of the Gold Exchange Standard. 13. The Appointment and Recommendations of the Fowler Committee. 14. Arguments in favour and against Return to Silver. 15. The Lindsay Scheme. 16. The Lesley Probyn Scheme. 17. Recommendations of the Fowler Committee. 18. Government's Action on the Report. 19. Resumption of the Coinage of Rupees. 20. The Abandonment of the Fowler Scheme. 21. The Crisis of 1907-08 and its Lessons, 22. Government of India's Proposals. 23. The Secretary of State's Decision. 24. The Main Features of the Gold Exchange

Standard. 25. The Maintenance of the Rupee-Sterling Ratio. 26. Essential Conditions for the Working of the Gold Exchange Standard. 27. Exchange Mechanism under the Gold Exchange Standard System. 28. The Chamberlain Commission: its Findings and Recommendations.

pp. 418-455.

Chapter XVIII. Currency and Exchange (Continued).

II. THE BREAK-DOWN OF THE EXCHANGE STANDARD. 1. The Immediate Effect of War on Indian Currency and Exchange, 2. The Favourable Balance of Account: its Immediate Consequences. 3. Effects of Rise in the Price of Silver. 4. Measures taken by the Government. 5. Changes in the Gold Standard Reserve. 6. The Appointment of the Babington Smith Committee. 7. Recommendations of the 8. Government's Action on the Report. Committee o. Break-down of the 2s. Ratio: its Causes. 10. Further Fall in Exchange. 11. Restoration of Favourable Trade Balance and Improvement in Exchange. 12. The Attainment of the 15, 6d. Gold Ratio, 13. The Introduction of the Sterling Purchase System. III. INTRODUCTION OF THE GOLD BULLION STANDARD. 14. The Appointment of the Hilton-Young Commission. 15. Defects in the Existing System, 16. Some Alternative Proposals. 17. The Gold Bullion Standard. 18. The Selling Rates for Gold. Issue of Gold Saving Certificates. 20. Convertibility of Notes into Silver Rupees. 21. The Unification of Reserves and their Composition. 22. Checks on the Purchase of Cold for Non-monetary Purposes. 23. The Establishment of a Reserve Bank and the Unification of Currency and Credit Control. 24, Stabilization of the Rupce. 25, Commissiou's Arguments against 1s. 4d. Ratio. 26. Minority's Minutes of Dissent. 27. Advantages of the 1s. 6d. Ratio to Britain. 28. Government's Action on the Commission's Report. 29. The Automatic Character of the New System. 30. Currency and Exchange during 1927-31. IV. THE RE-ADOPTION OF THE STERLING EXCHANGE STANDARD. 31. The Currency Crisis of 1931 and Linking of the Rupee

to Sterling. 32. Merits of Linking the Rupee to Sterling. 33. Arguments against the Linking of the Rupee to-Sterling. 34. Consequences of the New System. posal regarding Purchase of Gold by Government. V. PAPER CURRENCY. 36. The Paper Currency Act of 1861. 37. Main Defects of the System. 38. Changes in the System: 1861-1914. 39. Paper Currency during the War. 40. Recommendations of the Babington Smith Committee regarding Paper Currency. 41. Government's Action on the Report. 42. Recommendations of the Hilton-Young Commission. 43. Government's Action on the Report. 44. The New Reserve Bank of India Act. 45. Note Circulation and the Composition of the Paper Currency Reserve. 46. Paper Currency and Reserves under the Reserve Bank. VI. THE FUTURE OF THE RUPER. 47. The Problem of the Standard. 48. The Problem of the Ratio. pp. 456—513.

Chapter XIX. Price Movements. 1. Movement towards
Price Uniformity 2. Price Movements during the Pre-War
Period. 3. Causes of the Pre-War Rise in Prices: the
Datta Committee's Diagnosis. 4. Examination of the Datta
Committee's Contentions. 5. Prices During the War.
6. Effects of Pre-War Rise in Prices. 7. Effects of Rise
in Prices during the War Period. 8. Period of Falling
Prices: 1921-29. 9. Prices during the Trade Depression
Period. 10. Consequences of Fall in Prices. pp. 514—527.

Chapter XX. Banking and Credit Organization. 1. Scope of the Subject. 2. The Indigenous Bankers. 3. Early European-managed Banking Institutions and the Presidency Banks. 4. Government's relations with the Presidency Banks. 5. Restrictions on the Business of the Presidency Banks. 6. The Imperial Bank of India. 7. Constitution and Functions of the Imperial Bank. 8. The Position of Imperial Bank in Indian Credit Organization. 9. The Development of Indian Joint Stock Banks. 10. The Working of Joint Stock Banks. 11. Slow Progress of Indian

Joint Stock Banks: its Causes. 12. Some Drawbacks and their Remedies 13. Foreign Exchange Banks. 14. The Business of Exchange Banks. 15. Some Abuses and Drawbacks. 16. Co-operative Credit Societies and Land Mortgage Banks. 17. Postal Savings Banks. 18. The Reserve Bank of India. 19. Business of the Bank. 20. Business Prohibited to the Bank. 21. Central Banking Functions of the Reserve Bank. 22. Obligation to Sell and Buy Sterling. 23. Cash Reserves of Scheduled Banks. 24. Agricultural Credit Department. 25. Other Provisions. 26. Agreement with the Imperial Bank. 27. Defects in the Reserve Bank Act. 28. The Imperial Bank of India Amendment Act of 1934. 29. The Past and Present Organization of the Money Market in India. 30. Consequences of Lack of Organization. 31. The Reserve Bank as a Co-ordinating Agency. 32. Possibilities of Extending Banking Facilities. 33. The Adequacy of the Present Credit Facilities. pp. 528-568.

Chapter XXI. Public Finance. THE EVOLUTION OF INDIAN FINANCIAL SYSTEM. 1. Financial Relations between the Central and Provincial Governments during the Pre-War Period. 2. Financial Relations under the Reformed Constitution. 3. Defects in the Existing System. 4. Powers of Borrowing and Levying New Taxes. FINANCES OF THE CENTRAL, AND PROVINCIAL GOVERNMENTS. 5 Budgetry Position in the pre-Reform Period. 6. Deficits during the early Reform period and the appointment of the Retrenchment Committee. 7. The Finances of the Central Government during recent years. 8. Provincial Finance during recent years. REVENUES OF THE CENTRAL GOVERNMENT. g. Classification of Indian Revenues. 10. Customs. 11. Income Tax. 12. Salt Tax. 13. Opium. 14. Railways. 15. Posts and Telegraphs. 16. Tributes from Indian States, 17. Currency and Mint. 18. Countervailing Excise Duties. 19. Interest. 20. Defence Services. Pro-VINCIAL REVENUES. 21. Land Revenue. 22. Irrigation. 23. Excise. 24. Stamps. 25. Registration. 26. Debt Services. 27. Scheduled Taxes. 28. Forests. 29. The Burden of Taxation. 30. Drawbacks of the Taxation System. Public Expenditure. 31. Growth of Public Expenditure. 32. Expenditure on Various Services: their relative position. 33. Criticism of Public Expenditure. 34. The Public Debt in India: a Historical Survey. 35. The Growth of Public Debt during and since the war. 36. Debt Service: India's Responsibility. 37. Arrangements for the Redemption of Debt. Finance under the New Constitution. 38. Re-allocation of the Sources of Revenue. 39. Possible New Sources of Revenue. Local Finance. 40. A. Municipal Finance. 41. Defects in the Municipal Revenue System. 42. B. Local or District Board Finance. 43. Defects and their Remedies. . . . pp. 569—625.

Chapter XXII. Trade, I. INTERNAL TRADE, I The Importance of Internal Trade in India. 2. The Statistics of Internal Trade. 3. Coastal Trade. 4. Inland Trade. 5. Trade Centres in India. 6. Commercial Intelligence and Organization. II. FOREIGN TRADE. 7 A Brief Historical Retrospect 8. Trade in Modern Times. 9 Some Outstanding Landmarks of Indian Trade in Modern Times. 10. Fluctuations in the Volume of Trade and Prices. 11. Outstanding Features of our Foreign Trade. 12. The Direction of India's Trade. 13. The Entrepot Trade in India. 14. Balance of Trade and Movement of Treasure. 15. Gold Exports. 16. Balance of Accounts. 17. The "Drain", 18. Land Frontier Trade. 19. Foreign Trade and National Prosperity. 20. The Future of India's . рр. 626—665. Foreign Trade.

Chapter XXIII. Trade Agreements. I. OTTAWA AGREEMENT.

1. A Brief Survey of Imperial Preference. 2. The
Background of Ottawa Agreement. 3. The Principal
Clauses of Ottawa Agreement. 4. The Economics of Preferential Trade. 5. The Working of the Ottawa Agreement:
A. Exports from India. 6. B. Imports into India. 7. The
Advantages and Disadvantages of the Ottawa Agreement.
8. Conclusion. II. INDO-BRITISH TRADE AGREEMENT.

9. The Principal Clauses of the Agreement. 10. A Review of the Agreement. III. Mody Clare-Lees Agreement. 11. How it was negotiated. 12. The Principal Clauses of the Agreement. 13. A Scrutiny of the Agreement. IV. Indo-Japanese Trade Agreement. 14. The Genesis of the Indo-Japanese Trade Agreement. 15. The Important Clauses of the Agreement. 16. The Basis of the Agreement. 17. The Working of the Agreement. 19. 666—690.

Chapter XXIV. Unemployment. 1. Varieties and Causes.
2. Unemployment among skilled handicraftsmen. 3. Rural
Unemployment. 4. Unemployment among the educated
Classes: its growth and Causes. 5. Government Inquiries
on unemployment among the educated classes. 6. Reform
of educational System: its limitations. 7. Palliatives as
against true remedies. 8. The Responsibility of the Central
Government. pp. 691—704.

Chapter XXV. The National Dividend. 1. The Meaning and Importance of National Dividend. 2. Methods of Calculation. 3. Various Estimates of National Dividend: Dadabhai Naoroji's Estimate. 4. Other Estimates upto 1913-14. 5. Post-War Estimates. 6. Intensive Enquiries. 7. The Effect of the Distribution of Wealth on National Dividend. 8. Interpretation of the Different Estimates of National Dividend. 9. India's National Dividend compared with other countries. 10. Indian National Dividend in terms of the consumption of bare Necessities of Life. 11. Indian Poverty. pp. 705—718.

pp. 719-729.

Index.

INDIAN ECONOMICS

CHAPTER I

THE NATURAL RESOURCES OF INDIA

The Importance of Natural Resources. The natural resources are the foundation on which the industry and commerce of a country are based. The skill and inventive genius of man have achieved wonders, but the greatest of these wonders, from the industrial point of view, ultimately lies in the modification of matter, or the natural resources, into certain forms and shapes. It might be argued that a country, poor in natural resources, might buy the raw products from others and, if it has the requisite skill, might manufacture goods more cheaply and efficiently than the country rich in natural resources. This has undoubtedly happened in the past and is happening at present; but experience has shown that industrial skill and inventive genius are not the monopoly of any country, and besides, what has been achieved by one country can be easily copied by others. The result is that, "commerce and industry thus tend to be governed more and more by geographical conditions which accordingly demand the most careful and detailed examination." An illustration will make this point clear. On account of its natural advantages the cotton textile industry has flourished in India since times immemorial, and, until less than two centuries ago. India not only supplied her own extensive home market, but, "every one from the Cape of Good Hope to China, man and woman, was clothed from head to foot in the products of Indian looms." As a result of the invention of machinery in England and her conquest of India, the cotton industry of India steadily declined

¹ Handbook of Commercial Geography by Chisholm, p. 7.

Pyrad quoted by Moreland: India At the Death of Akbar, p. 186.

until she lost all her foreign trade and supplied only a fraction of her home market. But in course of time machinery was brought and set up in India and the foundations of her modern textile industry were laid. In spite of its many vicissitudes, the cotton industry in India is steadily advancing and it does not need a prophet to foresee that in a comparatively short time India can and will entirely supply her home market and may become an important exporting country. The advantages enjoyed by the British cotton industry on account of the invention of machinery in England and the British political power may be called historical advantages as opposed to the natural advantages enjoyed by India. These historical advantages are in their nature more temporary, though they are often in fact of long continuance. In course of time the historical advantages disappear and the natural advantages have a tendency to govern commerce and industry. Thus we find that with the gradual disappearance of her historical advantages the Lancashire textile industry is steadily declining, and with the gradual disappearance of her historical disadvantages the Indian textile industry is steadily advancing. The consummation of these tendencies is only a question of time. And if the historical advantages enjoyed by Lancashire for nearly two centuries have proved in the long run temporary and precarious in their very nature, it is obvious that Japan, whose natural advantages in the field of cotton textiles are no better than those of Britain, must ultimately share the same fate, however dazzling her success for the time being. It is thus clear that commerce and industry tend to be governed more and more by geographical conditions, and so the student of Indian economic problems must make a careful study of the country's physical environment and her natural resources, as these constitute the very foundations of our economic life, and the importance of the part played by them cannot be exaggerated.

Area, Population and Geographical Location. India is a huge country measuring about two thousand miles from north to south and about two thousand five hundred miles from east to west. It has a land frontier of about six thousand miles

and a coast line of about five thousand miles. Its area is eighteen hundred thousand square miles, and the country is a natural geographical unit. It has a population of 353 millions which forms almost a fifth part of that of the whole world. Nature evidently intended India to be a big and powerful unit in the world and her geographical location is as favourable as her vast area and huge population. (India stands at the centre of the eastern hemisphere and occupies a favourable position for commanding the different trade routes. The centre of gravity in the world is gradually shifting from the Atlantic to the Pacific which is the highway for China, the United States, South America, Japan, with Russia turning eastwards and the vast masses of India not far off. This change will have momentous consequences and India stands to gain by it. Her present favourable situation for participating in the carrying trade of the world will be considerably improved.

The Natural Divisions of India. India is naturally divided into four well-marked divisions the Himalayas, the Indo-Gangetic plain between the Himalayas and the Vindhya mountains, the Peninsula below the Vindhya mountains and lastly Burma which is not strictly speaking a geographical part of India. The Himalayas dominate the life of India especially of the northern parts. The broad, deep rivers flowing through the Indo-Gangetic plain get their perennial supply of water from the melting snow of the Himalayas which constitute an almost impregnable barrier on the east, the north and the north-west. The Himalayas further exercise a predominent influence on the climate, rainfall, winds, vegetation and the forests. The Indo-Gangetic plain is a vast and fertile tract of alluvial soil well-watered by the two great riversystems flowing into the Arabian Sea and the Bay of Bengal respectively. The Peninsula is an elevated plateau divided by the Vindhya mountains from the Indo-Gangetic plain. is flanked by the Western Ghats and the Eastern Ghats respectively and the latter are broken by broad valleys through which the peninsular rivers flow into the Bay of Bengal. Unlike the Himalayan rivers, these rivers flow in torrents during the monsoon and are mere puddles during the hot weather. They are therefore useless both for navigation and irrigation. The eastern parts of the peninsula, with a better rainfall and a river system and broad valleys are more fertile than the western parts. Lastly, Burma is geographically, racially and culturally different from India and until comparatively recently it was politically different too. The special feature which distinguishes Burma is her vast mineral and forest wealth which is by no means unconnected with the vigorous British efforts to separate Burma from India. Burma is far and away the richest Indian province in mineral wealth and politically she is more backward than India.

Climate. Climate has a considerable influence on the economic life of a country. In the case of India it is rather risky to generalize as meteorologically India presents a great variety combining tropical and temperate region conditions. On the north the Himalayan range and the plateau of Afghanistan shut it off from the climate of Central Asia, and give it a continental climate, with its land winds, great dryness of the air and a large diurnal range of temperature. On the south, the ocean gives it an oceanic climate, with its great uniformity of temperature, small diurnal range of temperature. great dampness of the air and more or less frequent rain. On the whole the Indian climate may be described as semi-tropical with a depressing influence on the human body, and it must be recognized as a factor in the lesser efficiency of Indian labour. But while we recognize this defect in the Indian climate, we believe it is a gross exaggeration to attribute the economic backwardness of the country and the general apathy and listlessness of the people to climate alone. Until the eighteenth century India was a leading country in the world from the economic point of view, and there has been no material change in the climate of the country during the last two centuries. We must look elsewhere for the ultimate causes of our present unfortunate situation.

Rainfall. Perhaps nowhere in the world does rainfall play such an important part in the life of the people as it does in

India, because the bulk of the people live on agriculture which depends for its success on the rains. Sir Guy Flestwood Wilson, a former Finance Member in India, put it quite correctly when he said that framing the Indian budget was. "a gamble in the rains." The south-west monsoon accounts for co% of the rainfall, and so it is the pivot round which the life of the nation turns. The south-west monsoon is an extension of the south-east trade winds which cross the equator and are then deflected to the right becoming south-west winds. The season of the south-west monsoon extends from the middle of June to the middle of September, and the scasonal character of the rainfall is a peculiar feature of the country. There is a very considerable variation in ramfall in different parts of India, Cherrapanji in Assam with something like 460 inches forming one extreme and Upper Sind with something like three linehes forming the other extreme. In Burma, Assam, Eastern and Lower Bengal and the coast strip between the Western Ghats and the Arabian Sea we get the rains without fail; in Udaipur, Aimer and Bombay Deccan the rains are uncertain and precarious; and Upper Sind, Western Rajputana and Western Punish are areas of drought where cultivation without irrigation is precarious and even impossible. After the south-west monsoon we get a gentle, steady, north-east wind which gradually extends over the Bay of Bengal and is known as the north-east monsoon.

Seasons. In the north and centre there are three well-defined seasons. The winter, which extends roughly from November to February, is cool and dry without any appreciable rainfall except in the Indo-Gangetic plains and in the neighbouring territories. Then comes the dry-summer season, which extends from March to June, and which is characterised by high temperatures and absence of rainfall. The rainy season begins with the advent of the south-west monsoon in July and ends in October. Owing to the physical and climatic contrasts in the country the seasons also vary in different parts, and the variation in the mean temperature in the cold season between the Punjab and South India is as much as thirty degrees. The climate of the southern presidency was humorously described by a Governor of Madras as a variation

between hot, hotter and hottest. What is stated here about climate, rainfall and seasons is therefore only general and is subject to serious qualifications when applied to any particular part of the country.

The Soils: Alluvial Soil. The alluvial soils are the first type we shall deal with as the alluvial tracts are not only the most extensive but agriculturally the most important. The most extensive alluvial tract in India is the vast Indo-Gangetic plain which comprises the greater part of Sind, northern Rajputana, the greater part of the Punjab, the United Provinces. Bihar, Bengal and half of Assam. The area of this tract is 300,000 square miles and its width varies from 300 miles in the west to less than 90 miles in the east. The maximum thickness of the deposits has never been ascertained but the few borings which have been made show that the depth exceeds 1,600 feet below the ground surface. The soils of the tract are derived mainly from the Himalayas. Some alluvial tracts are also found in Burma, along the coasts of the peninsula, and at the mouths and along the courses of the great rivers, the Godavari, the Kistna and the Cauvery. The subsoils of the Indo-Gangetic plain are not uniform in texture but vary from pure sand to heavy clay and the great variations in fertility are probably due to the effect of the immediate subsoil layers in drainage and the retention of moisture. Alluvial soils can be irrigated with great advantage and are capable of growing a wide variety of crops as the depth of the soil secures great fertility.

Black Cotton Soil. We shall now deal with the black cotton soil which covers practically the whole of the Deccan trap and large areas in the Bellary, Kurnool, Cuddapah, Coimbatore and Tinevelly districts of Madras. The Deccan trap extends over about 200,000 square miles and covers the greater portion of the Bombay Presidency, the whole of Berar and the western parts of the Central Provinces and Hyderabad. The soils throughout this area vary to an extraordinary extent in character and productivity, and range from the thin, poor soils of the slopes and the uplands to the deeper and dark-

coloured soils, between the hills and the plains, which are constantly improved by washings from the higher levels. The Madras group of black cotton soils are clearly differentiated from the soils of the trap area as they are derived from the rocks with which they are intimately associated and they never attain the depth of the latter. But they possess many agricultural characteristics in common. The black cotton soil is very tenacious of moisture and extremely sticky when wet. It permits, however, of cultivation being carried on within a short period after heavy rainfall. The damp soil contracts markedly on drying, producing wide and deep fissures in the fields. The suitability of black cotton soil for irrigation is a matter of controversy and appears to differ according to the composition of different varieties of this soil.

The Red Soils. The "red" soils of the crystalline tract form our third group of soils and cover the whole of peninsular India outside the areas previously described. The wide variations in the characteristics of the rocks included in the archaean system, from which these soils are derived, give rise to corresponding differences in the soils which differ greatly in consistency, depth and fertility. Where the depth of the soil is favourable, irrigation, either by wells or canals, can be applied advantageously.

The Laterite Soils. The laterite soils which constitute our fourth and last group are derived from a rock known as laterite and are peculiar to India and a few other countries. The tracts in which it occurs are characterised by warm, humid conditions and heavy rainfall. The laterite soils show wide divergences in character, those found on the higher levels being thin, poor and of little agricultural value; while the soils of the valleys are dark coloured, readily retain moisture and are capable of producing quite good crops. The planting areas of South India, Bengal and Assam are generally placed in this category. These soils have a marked acid reaction and their main agricultural problem centres round the correction or amelioration of this acidity. Considerable attention has been devoted to this problem by the agricultural depart-

ments of Bengal, Assam and Burma and the scientific staff of the planters' associations. The absence of lime deposits in their vicinity renders the application of the obvious methods of amelioration very difficult.

Mineral Resources: I. Metalliferous Minerals. For obvious reasons iron-ore is the most important mineral of this group. It is found in almost every province in India, but the deposits in Bihar and Orissa, Central Provinces, Mysore and Madras are the most important. Some idea of the extent of these deposits may be had from the fact that the great iron-belt of Orissa alone is estimated to contain thousands of million of tons of high-grade ore. But although India is one of the largest reservoirs of high-grade iron-ore in the world, the production of the mineral stands in the neighbourhood of only about two million tons a year owing to the inadequacy of iron and steel plants in the country.

India's resources in the matter of copper, zinc, tin and lead ores, on the other hand, reveal serious deficiencies. Copperore is widely scattered all over the country, but nowhere except in the Singhbhum district in Bihar and Orissa has it been found in workable quantities. Zinc ore is also widely scattered, but it is only at Bawdwin in Burma that the deposits are being exploited; and the production of zinc concentrates at this locality averages about 20,000 tons a year. Lead ore is likewise found in many parts of India, but it is only at Bawdwin that it has been found in workable quantities. The mineral occurs in association with silver-zinc ores, and the production of the metal from these ores amounts to nearly 50,000 tons a year in normal times. Large quantities of silver-ore are also found in association with these minerals (which constitute the only sources of the metal in the country) and the annual production of pure silver amounts to over Rs. 50,00,000 in value. These silver-lead-zinc ore deposits of Bawdwin, however, are not expected to last for more than a quarter of a century at the present rate of exploitation, so that unless some new deposits of these minerals are discovered in some other parts of the country, their production in India would automatically cease after the exhaustion of the Bawdwin mines. Tin-ore is also found in many parts of India but it is only in some parts of Burma that it is found in workable quantities. The production of this mineral averages about 50,000 cwts. a year at the present time which is far too inadequate for the requirements of the country or even to warrant the establishment of a modern smelting plant. The deposits of this mineral in Burma, however, may be regarded as practically inexhaustible at the present rate of exploitation.

Manganese ore, which is used on an extensive scale in the iron and steel industry in smelting operations, occurs in many parts of the country, and India is one of the largest producers of the mineral in the world. It is now being worked in Bihar and Orissa. Rombay, Mysore, Madras, Central India and Central Provinces, and the total output in normal times amounts to nearly 800,000 tons a year. With deeper working, however, the quality of the mineral is deteriorating. Chromite or chromium ore, which is used in large quantities in various metallurgical operations and in the Chemical industry, is found 14 Baluchistan, Mysore and Bihar and Orissa, and the production at the present time averages nearly 40,000 tons a year, which is larger than that of any other country in the world. Bauxite, or aluminium ore, is found in almost every province in India, but the best and most extensive deposits of the mineral are situated in Bombay, Central Provinces, Madras, Orissa and the Kashmir State. As there is no demand for the mineral in India or abroad, its production is almost negligible; yet even in the present state of incomplete survey it may be taken as a fact that India is the largest known reservoir of high-grade bauxite in the world.

Gold deposits occur at Kolar in the Mysore State, and the annual production has averaged at nearly £1,500,000 in value during the last few years. Tungston ore is found in Burma and Orissa, but the deposits are being worked only in Burma. The annual production of the ore at the present time averages nearly Rs. 10,00,000 in value. Nickel ore is found in Burma and the Central Provinces, but the deposits are small and only

a few hundred-weights of the ore valued on an average at about Rs. 7,00,000 are annually raised.

Il Non-metalliferons Minerals. Coal is by far the most important mineral of this group, and is found in Bengal, Bihar and Orissa, Central Provinces, Assam, Hyderabad State, Jammu and the Punjab. The best and the most extensive deposits, however, are situated in Bengal and Bihar and Orissa, and the coalfields in these provinces are responsible for the production of nearly 90 per cent, of the coal annually raised in the country. The total annual production of coal in India has averaged nearly 20 million tons during the past two years. According to the estimates offered by the Geological Survey of India the reserves of coal in India amount to nearly 53,000 million tons, of which only about 10,000 million tons can be described as high-grade and which include nearly 2,000 million tons of coking coal. As not more than 70 per cent. of coal in reserve can be actually extracted, it is obviously necessary that India should safeguard the interests of her industries by conserving coal as far as possible.

Mineral oil or petroleum occurs in Burma, Assam and the Punjab, and annual production at the present time averages nearly 300,000,000 gallons. Nearly 80 per cent. of this total is accounted for by the Burmese oilfields. These oilfields are almost entirely owned by British companies. India as a whole, however, is responsible for the production of a little over ½ per cent. of the world's total output. The supplies obtained from within the country are not enough even to meet the requirements of India with the result that on an average nearly 200,000,000 gallons of kerosene and fuel oil have to be annually imported. Moreover, the known deposits are being rapidly exhausted, so that unless some new deposits are discovered in the near future, India's dependence on foreign countries for the supply of petroleum products would rapidly grow with the passing of time.

From the industrial point of view, sulphur is only next to coal in importance. It is the basis of sulphuric acid manufacture which in its turn is the starting point in the manufacture of an endless variety of chemicals of the greatest industrial importance. But unfortunately neither pure sulphur nor sulphides (which are an important source of sulphuric acid) are found anywhere in India in large workable quantities. The result of this deficiency is that India is completely dependent on other countries for the supplies of sulphur.

Clavs of various kinds which are used in the manufacture of refractory bricks, tiles, earthenware piping, porcelain, electrical conduits and insulators and ordinary earthenware are found in many parts of India. The Geological Survey of India has expressed the opinion that "there can be little doubt that India possesses also all the materials necessary for the manufacture of porcelain of the highest quality, such materials being found in the Jubbulpore district and the Rajmahal Hills."1 Again, sand of the purest quality for the manufacture of glass is found in almost unlimited quantities at Naini in the United Provinces and in Baroda India is also one of the largest producers and exporters of mica of the finest quality in the world. Extensive deposits of this mineral occur in Bihar and Orissa and in the Madras Presidency. And lastly magnisite. which is the most valuable refractory material and is used for a number of other purposes in industry, is found in the Madras Presidency and the Mysore State, and is exported in large quantities. The total annual production of this mineral at the present tune averages over 20,000 tons.

Mineral Resources: A general review. In summarizing the present position of India's mineral resources we may divide the minerals into four groups: (a) those which are found in super-abundance, (b) those whose deposits are just adequate to meet the country's own requirements and to meet the demands of the export trade to a certain extent, (c) those whose supplies are inadequate to meet India's own requirements, and (d) those which are not found in workable quantities. Iron-ore and bauxite (aluminium ore) obviously belong to the first group. Manganese, and tungston ores, coal, chromite, magnesite and

¹ See Records of the Geological Survey of India, Vol. LII, p. 279.

mica belong to the second group. Copper, zinc, tin and lead ores, and petroleum belong to the third group; while to the last group belongs sulphur. In view of the fact that prospecting work has never been done over wide areas in the country, it is possible that a more intensive survey may yet reveal the existence of copper, zinc, tin, lead, petroleum and sulphur deposits; but the publications of the Geological Survey of India do not encourage such belief. It is more likely, therefore, that India will for ever remain dependent on foreign countries for the supply of all these minerals—as indeed she has been from times immemorial. But from the point of view of industrial development there is nothing unusual or unnatural about this dependence. Almost all the great industrial countries are dependent on foreign countries for the supplies of sulphur: while so far as copper, zinc, tin, lead and petroleum are concerned, modern science has already introduced excellent substitutes in the shape of aluminium, coal distillation products and electricity.

But the position will get distinctly worse if the threatened separation of Burma from India materializes. As we have seen, it is in Burma that copper, zinc, tin, lead and silver ores are being produced, and it is in this province that intensive prospecting surveys are more likely to reveal the existence of workable deposits of these minerals. Again, it is from Burma that more than 80 per cent. of India's petroleum output is obtained and it is here that new oilfields are being discovered. Burma in short is an extensive reservoir of minerals, and it seems the political destiny of Burma and incidentally the economic destiny of India are both being swayed by the existence of these mineral deposits.

Forests. An idea of the importance of forests in India as a great economic asset may be had by taking into account the varied character of their products and their extensiveness. The climatic conditions in India vary from tropical in the plains to temperate and arctic in the Himalayas, so that almost all important varieties of timbers and other forest products are found in one part of the country or the other. The forests everywhere have a tendency to be destroyed by man more quickly than they can be grown and reproduced, and it is one of the

obvious functions of the state to conserve them. The British Government in India awoke to the necessity of the conservation of Indian forests as late as 1855, but now the Indian Forest Department controls more than one-fifth of the total area in British India. The utilities of the forests are many and varied. In addition to timber, firewood and raw materials for various industries, the forests provide a vast grazing ground for cattle which is unfortunately not utilized to the best possible advantage owing to an unsympathetic forest administration. The indirect advantages of the forests are no less important than the direct advantages. The forests render the climate more equable. regulate the flow of water and the velocity of air currents, increase the fertility of the soil, provide a shelter for birds and beasts and finally they add to the beauty of the country and improve the æsthetic sense of the people. The distribution of forests among the various provinces in India is fairly even but Burma is far and away the leading Indian province in the richness and the extent of her forcests. Until comparatively recently the Government of India did not recognize the necessity of forest research and it was only in 1906 that they started at Dehra Dun the Forest Research Institute which has been considerably enlarged in accordance with the recommendations of the Indian Industrial Commission. The potentialities of forest research in India are almost unlimited owing to the richness, the variety and the vast area of her forests. The outturn of timber and fuel in 1929-30 was about 350 million cubic feet and the net profit to Government was Rs. 250 lakhs. The minor forest products such as lac, tauning materials, turpentine, rosin and oils are steadily increasing in importance. An important piece of research, which has proved that paper pulp can be produced from bamboos, has great potentialities in it as it can not only provide all the paper which India requires but holds out hopes of making India, with her extensive forest areas of bamboo, an exporter of paper. We have said enough to show that the potentialities of Indian forests are very great, and under a vigorous co-ordination of forest research and industrial planning, we may confidently look forward to the

birth of new industries which will tap our forests for their raw materials.

Flora and Fauna. Wide variations in climate and in the quality and chemical composition of soils enable India to produce an extensive variety of vegetable products as well as animals. Taking the vegetable resources first, we find that the country produces rice, wheat, jowar, baira, barley, maize and gram in the shape of food-grains; a variety of fruits, condiments and spices; sugarcane, tea and coffee; a variety of oil seeds like rapeseed, linseed, sesamum, mustard, groundnuts and castor; cotton and jute; opium, tobacco, rubber, fodder crops and forest products. As regards animals, the species indigenous to India are probably more varied than is the case with any other area of similar size in the world. In a country where the great majority of people are vegetarians, milk is an essential article of diet, and the cow and the buffalo are greatly valued for supplying milk. The bullock plays an important part in our agricultural economy as he is used for ploughing the land and as a draught animal. The donkey is a common beast of burden in all parts of the country, but the supply of horses, especially of steadier varieties, is limited. The camel is the common beast of burden in the Punjab, Sind and Rajputana. The sheep and the goats are plentiful. The Indian agriculturist does not use any mechanical power or artificial manure and these animals are a substitute for both. A large variety of edible fish abound our seas, but their exploitation on scientific lines (except to some extent by foreigners for their own markets) has not yet begun. There is besides a great variety of birds and wild animals in the country.

Transport. The problems of transport will be discussed in detail in their proper place and here we shall content ourselves with making a few general observations. The airways, though they have great potentialities in a large country like India, are still in their infancy and for the time being may be neglected. Then we come to the roads and railways. In this connection the situation in the north is very much better than in the south, as both road construction and railroad construction are very much easier and cheaper in the great plains of north India than in the rugged and mountainous south.

And in addition north India has broad, navigable rivers which the south does not possess. The inland waterways in India. which have been the highways of Indian commerce since many centuries and which constitute a cheap and easy way of transporting men and goods, have been sadly neglected under the pressure of railways which were, until very recently, managed by foreign companies. India has a long coastline of about five thousand miles, but nature, which has been very generous to her in many respects, has been niggardly in providing good, natural harbours. During the monsoon the west coast is practically closed to navigation, with the exception of Bombay, Karachi and Mormagoa. The cast coast is surf-bound and without any natural harbours. Madras has been created into a not very satisfactory harbour at great expense, and Vizagapatam and Cochin supply badly needed additional ports. Calcutta is well situated but the river near Calcutta is very difficult to navigate and the necessary dredging operations are very expensive. Rangoon is not only far from the sea but has no satisfactory communications in its hinter land. This paucity of good, natural harbours explains why six-sevenths of India's foreign trade is confined only to five ports, namely, Calcutta, Bombay, Rangoon, Madras and Karachi, Bombay is far and away the best natural harbour in India, with Karachi coming a bad second.

The Sources of Power. The supply of cheap power is one of the essential conditions of success in industrial development. The principal sources of power in India are coal, wood-fuel, oil and water. We have already discussed the problems of coal and oil; and wood-fuel presents its own problems of the heavy cost of transport often from hilly tracts which are not easy of access and the insufficiency of its supplies for a large scale industrialization of the country. There remains only water power. And fortunately for India water power can amply make up the deficiencies of her coal and oil. The hydrographic survey of India has brought out great possibilities in connection with the development of hydro-clectric power. It has been estimated that the minimum flow of the seven great

than three million horse power for every thousand feet of fall from the Himalayas, and this applies to other rivers in other parts as well. The Western Ghats are specially suitable for projects of this kind and the Tatas already generate 377.55 million units which has removed the handicap of Bombay in not having any coal supplies in its vicinity. The problem of power need not trouble us; nature has given us ample sources and it only remains for man to utilize them. And it must be borne in mind that hydro-electric schemes will not only supply power to our industries but they will extend the irrigation facilities in the country. Situated as India is, her economic salvation is intimately bound with the utilization of water power which helps both agriculture and industry.

Conclusion. The obvious conclusion which emerges from this very brief and general survey of the natural resources of the country is that nature has treated us very generously in the variety and richness of her gifts. And in spite of the lavishness of her bounties the Indian is one of the poorest and weakest of mortals. The ultimate problem for the student of our economic problems is to explain this extraordinary paradox: India is a rich country where poor people live. The whole of this volume deals with the elucidation of this paradox, and here we shall content ourselves with discussing only one point. We have already seen that in the long run natural advantages are more important than historical advantages and ultimately they tend to govern commerce and industry. Man may frustrate the object of nature and may succeed in doing so over long periods. But ultimately the natural advantages tell and exercise their force which is as inevitable as it is irresistable. If this diagnosis is correct India cannot escape her economic destiny: nature has marked her out as one of the biggest and most important economic units; the pace of modern industrialization is such that it needs but a decade or so to transform the economic life of a nation entirely and bring it in line with the economically advanced countries; and India's vast population and her splendid natural resources must secure for her a leading

place in the economic life of the world. Starting with one paradox that India is a rich country where poor people live we have to conclude with another paradox that India is a poor country which is inevitably destined by nature to be rich and powerful Man cannot permanently obstruct the play of natural forces which in the long run have their way

CHAPTER II.

THE ECONOMIC CONSEQUENCES OF OUR SOCIAL AND RELIGIOUS INSTITUTIONS

The Importance of the Subject. It is a truism to say that our social and religious institutions play a very important part in our economic life, and on that account descrye a careful study at the hands of a student of Indian economic problems. The caste system determines to a considerable extent a man's social standing and the sphere of his economic activity; it also determines, more or less rividly, the extent of his expenditure on ceremonial occasions, whether he can afford it or not. A substantial portion of the indebtedness in the country is due to this rigid ceremonial expenditure, and its economic consequences can be hardly exaggerated. The joint family system determines that the earnings of every member must be handed over to the head of the family who meets the requirements of the various members according to their necessities. It is a near approach to socialism within its own sphere and offers an alternative solution for old age pensions, unemployment doles and such other important economic problems. The student of Indian economic problems therefore cannot afford to neglect our social and religious institutions.

The Caste System. The caste system is by far the most characteristic feature of our social organization and demands our attention first. The four original castes, the Brahmana, the Ksattriya, the Vaisya and the Sudra have been sub-divided into innumerable smaller groups which have functioned as separate castes for all practical purposes. The members of a caste or sub-caste must not dine or marry outside their particular group and so society is divided into thousands of water-tight compartments. The caste system must be clearly distinguished from the social gradations existing elsewhere, because the latter are fairly flexible and there is no religious bar

to prevent a man passing from one class into another. In India birth largely determines a man's social and domestic life, and he must eat, drink, dress, marry and give in marriage in accordance with the usages into which he is born. The origin of the caste system, though it has given rise to many ingenious speculations, need not detain us here, as we are more concerned with the caste system as a fact than with its genesis. Castes have been roughly classified into tribal or racial castes, functional or occupational castes, local or migrating castes, religious or sectarian castes and some other groups like the mixed, the untouchable and the caseteless. The rigidity of the caste system is its most characteristic feature. In its early stages it was not so rigid, and while it is difficult to trace exactly the causes which made for the subsequent rigidity, we believe that the effort to segregate permanently the Dravidians ultimately reacted on the social organization of the Aryans themselves, and made it impossible for them to escape the coils of the watertight compartments into which they had confined their Dravidian subjects.

The Advantages of the Caste System. While it is not possible to defend the caste system in its present form, nevertheless it has some distinct social advantages which we must take note of. That some kind of division of labour was at the root of the caste system in the beginning is undoubtedly true, and to the extent of its operation it makes for economic strength and efficiency.] Before the industrial revolution hereditary occupations generally prevailed everywhere and the father taught his trade to the son at home. The defect of the caste system was that this custom became rigid and inflexible. The occupational castes have been compared to the mediæval trade guilds of Europe. They served the same purpose of mutual benefit sociation, but while the guilds were voluntary associations and permitted qualified strangers to become members, the castes were havoluntary essociations which no strangers could join. And the exclusive inter-dining and inter-marrying of the castes had nothing corresponding to it in the guild organization. The caste system erested strong and consolidated units in the Hindu

society and so enabled it to face foreign comment without suffering dissolution. It preserved purity of blood within the caste and so conserved the moral, mental and physical qualities of the higher castes The castes developed a strong sense of group consciousness and the members learned to subordinate individual self-interest to caste interests. The caste system was a great source of strength to the religious organization and generally prevented mass conversions of Hundus to foreign converting religions It is also responsible for the fundamental stability and contentment of Indian society. During the Aryan invasion the caste system probably helped the collaboration of races and co-operation of cultures. To sum up, it may be said that the caste system has all the virtues of a static society which desires to conserve rather than to advance and which prefers order to progress The dynamic elements in society are allowed hardly any scope for self-expression

The Disadvantages of the Caste System. Whatever the caste system may have served at its best, we cannot but condemn it outright in its present degenerate form. By dividing society into thousands of water tight compartments, it has prevented the evolution of a strong and well-knit nation, and the lesser loyalties of the caste have taken the place of the larger national lovalties. The caste system is responsible in no small measure for our political serfdom, and as without political independence we cannot realize our economic destiny, it is indirectly responsible for our economic backwardness also. The constant inbreeding, which a rigid adherence to the caste system entails, is responsible for the biological deterioration of the superior stocks. It also leads to a second disparity, as some castes have a larger number of maker and others a larger number of females. This, in its turn, estable such pernicious customs as heavy downes and in some true cases even infanticide. The caste determines a man's occupation. and as heridity cannot always provide the necessary applicate, a square per is not infrequently fitted into a round bole. Another charge against the caste system is that it is responsible for the immobility of capital and labour and the formation of itself seecompetitive groups. Large scale production is the essence of modern economic organization, and the caste system hinders it by lack of co-operation between capital, labour and organizing ability (which often belong to different castes) and between different kinds of labour. Standardization of production is prevented as different castes insist on maintaining their little differences in food, clothes, utensils, furniture etc. The caste system has its own scale of values for different kinds of labour. It also objects to certain improvements in the technique of industrial and agricultural production, as for example the use of bone, fish and nightsoil as manure for agriculture; and it strongly insists on the preservation of useless cattle while there is not enough food for useful cattle. The caste system is utterly opposed to the principle of equality, and untouchability, though it has been carried to extraordinary lengths. 15 by no means antagonistic to the spirit of the caste system. with its fundamental principle of high born and low born.

The Present Position of the Caste System. The influence of western civilization, which dominates the educated classes, is antagonistic to the caste system, and the modern means of transport like the railways have a tendency to soften its rigidities. The industrial revolution has been incorporated into India in a very small measure, but even so a considerable number of people are employed in large scale production which is by no means traditional or based on the caste system. Economic necessity has forced a number of members of the higher castes to set up as traders, shopkeepers, etc. Vocation to-day is no longer a sure indication of caste. While railway travelling does not permit the ceremonious observance of the caste rules and regulations and the mind of the educated Indian is working against it, a new consciousness of their rights and privileges is permeating the lower classes. This new consciousness has been tremendously stimulated by the extraordinarily vigorous campaign of Mahatma Gandhil against untouchability which has brought about a substantial change. Even the conservative Hindus have become amenable to the influence of ideas of social equality, and the Poona Pact is a historic event of first rate

INDIAN ECONOMICS

importance. The indirect result of Mahatma Gandhi's campaign against untouchability has been to weaken considerably the strength of the caste system as a whole. But while we gratefully recognize all these changes in the right direction, it would be a mistake to minimize the tremendous vitality of the caste system. Even among the educated classes, which constitute a microscopic minority, while the ban on inter-caste dining is steadily giving way, inter-caste marriages are still such rare events as to excite extraordinary interest. But while the grip of the social system remains unrelaxed, the mind of the educated classes is travelling away from the traditional taboos On the other hand, the hold of the caste system on the Indian mind is so strong, that it has affected even such perfectly democratic communities as the Mohommedans and the Sikhs, who do not recognize any caste and yet prefer to arrange their marriages in the original caste No one can foresee any reasonable period within which the caste system will die out. The present position is that while deviations from the caste taboos among the educated are more or less tolerated, the traditional strength behind the caste system is so tremendous that even these deviations among the microscopic minority of the educated people are absolute rarities. And naturally the position among the villagers, who constitute the vast bulk of the Indian people, is much worse. The educated classes are all more or less agreed on fundamental political and economic changes in the country; but the necessity for a social revolution is no less urgent as without it we cannot truly lay the foundations of our economic and political salvation.

The Joint Family System. Next only to the caste system, another characteristic feature of Indian society is the joint family system. A family in the west is understood to mean a man, his wife and his minor children. The joint family often consists of three generations, with several collaterals, fourthing a single household and joint in food, worship and estate. The institution of the joint family is the basis of Hinds Law, and its affairs are managed by the eldest male member of the jamily. The earnings of the different members are thrown into the common stock. Every one earns according to his capacity and

receives according to his necessity. Within its limits the joint family makes a near approach to socialism. The joint family as an institution has been maintained for many centuries by the strong ties of kinship, common religious worship, the social tradition and above all by the difficulties of communication and lack of opportunities for the individual to carve out a separate career for himself.

The Advantages of the Joint Family System. The joint family system includes loyalties which are larger than the loyalty to one's individual family. It provides for a system of mutual insurance. It guarantees at least bare subsistence to every body and above all to widows and orphans who may be left unprovided for. It provides an alternative solution for the problems which old age pensions, poor relief and various systems of compulsory insurance are calculated to solve It secures the advantages of a simple division of labour and the economies of running a large household. Extra expenditure involved in furnishing a seperate home for small families is evoided. It prevents the sub-division and fragmentation of land and enables the resources of the joint family to be used to the best possible advantage. And it inculcates such social virtues as discipline, loyalty, obedience, self-sacrifice, reverence and the capacity for a considerable number of people to live together and to work together.

The Disadvantages of the Joint Family System. The joint family system does not provide for the stimulus of individual ambition because there is no direct relationship between effort and reward. If a man works very hard, he is not much better off; and if he does not work at all, he is not much worse off. This puts a premium on idleness and irresponsibility so that naturally enough almost every joint family has its share of drones and individuals without any backbone. The joint family pre-supposes the merging of the interests of the individual into those of the group, and fine loss of individuality in the economic sense naturally slackens effort and enterprise which are the indispensable ingredients of economic progress.

It encourages immobility of labour and discourages the accumulation of capital as the richer members have to support the poorer ones. Large scale enterprise suffers in consequence.

The Present Position of the Joint Family System. While the joint family system as a social organization has by no means disappeared, it is steadily losing its strength and vitality under the pressure of disintegrating modern influences. The improvement of communications and the introduction of mechanical transport have enabled some individuals to break away from the family and seek a better independent living elsewhere. Individualism, which is such a characteristic feature of western thought, has a strong appeal for the educated Indian; and the individualistic bias of English law is equally opposed to the joint family. Since the beginning of the industrial revolution in this country and under the pressure of foreign competition, many old family occupations have disappeared and the family is forced to disperse. And above all the joint family is out of tune with the spirit of the time, and where it exists, it does not present the traditional picture of domestic bliss and contentment, but more often results in an unending series of petty squabbles, discontents and heartburnings. The gradual dissolution of the joint family scenes to be inevitable and we see it proceeding right under our eyes. But while our traditional methods of meeting want and suffering are disappearing, the modern methods of State help have not yet come into existence in this country; and at present we are in the unhappy transitional position in which want and suffering have no provision made for them by society.

The Laws of Inheritance and Succession. While the joint family system is being gradually dissolved, we are changing over from joint family property to individual private property. But unless a regular partition has been effected, Hindu law presumes common family property. The result of partition and inheritance is a wide-spread distribution of property. In effect the Mohomedan Law of Inheritance and Succession is very much like the Hindu Law. The principle of equality holds good and primogeniture is absent. The economic

consequences of this equal distribution of property are partly bad. For example it can result, in the case of land, in the creation of an independent class of peasant proprietors who constitute everywhere the backbone of society. But if carried too far, this equal distribution of land results in excessive subdivision and fragmentation, with its attendant evils of uneconomic holdings and a great deal of litigation. Again, the equal distribution of property adversely affects savings on a jarge scale, and therefore acts as an obstacle in the way of enterprise on modern lines. But on the whole, except for the excessive subdivision and fragmentation of land, which plays a very important part in aggravating the poverty of the people, our laws of inheritance and succession have not any serious economic consequences.

Ceremonial Expenditure. While ceremonial expenditure on occasions like birth, marriage and death is by no means the monopoly of India, it plays a part in Indian economic life which has, so far as we know, hardly any counterpart anywhere in the world. On account of the strength and the rigidity of the caste system, which determines this ceremonial expenditure in relation to each caste and sub-caste, the individual has no option except to fall in line, on pain of being outcaste, which is the worst calamity that can befall an orthodox Hindu. And the scale of this ceremonial expenditure, which seems to have been handed down from generation to generation, irrespective of any consideration of prices and earning capacity, is out of all proportion to the capacity of the people to bear it. The result is a tremendous amount of indebtedness which is common both to the city and the village, to the educated as well as the uneducated classes. It would be difficult to exaggerate the amount of life long suffering and misery which a birth, a marriage or a death involves in an Indian household; and millions in India live under a heavy load of debt all their life for having celebrated a so-called festive occasion. In its essence the problem is very simple, and it is obvious that the expenditure must be in proportion to a man's resources. But actually the resources of the individual have very little to do in

determining the scale of his ceremonial expenditure which is pre-determined by his caste or sub-caste; and the condition of these organizations is so hopelessly static, that it is most difficult, if not practically impossible, to bring about a radical change. A social revolution is an absolute necessity to free the people from the strong social fetters which they have tied round themselves. The educated classes, who can understand and realize the implications of this ruinous ceremonial expenditure. have a special responsibility to set a good example to their poor, ignorant, tradition-bound, caste-ridden countrymen: because the educated classes, though very few, wield a moral influence out of all proportion to their numbers. But unfortunately the educated classes have not yet been able to bridge the gap between their thought and action, and in this respect they are hardly any better than the rest of their countrymen. We have emphasised this question of ceremonial expenditure because we are convinced that it plays a considerable part in the poverty and the suffering of the people of India and deserves a much greater attention than is usually devoted to it.

Indian Spirituality and Other-worldliness and its connection with India's economic backwardness. Indian spirituality and other-worldliness are also held responsible for the general economic backwardness of the country. There is a great deal of confused thinking as to how far his religion and philosophy require an Indian to turn his back upon the things of this world in a way different from other religions and other philosophies; and secondly, as to how far the Indian follows the ascetic ideal in practice. The remarkable material progress of the Hindus, at a time when they achieved the heights of their spiritual attainments, is a conclusive evidence of the fact that the Hindu mind has not been exclusively preoccupied with religious and metaphysical speculations, though it has made these spheres peculiarly its own. The ancient Hindus were great empire builders, enterprising traders and daring colonisers. It is not disputed that they were the pioneers in the field of

mathematics and mechanics. Moreover, they were the greatest chemists, biologists, geographers and astronomers of their time : in fact they laid the foundations of these sciences. Again. in medicine, as in astronomy and metaphysics, the Hindus once kept pace with the most enlightened nations in the world. The Hindus invented Algebra and the Arabic numerals are called so because the Arabs took them from India to Europe. Indian handicrafts were famous all over the world and the various European traders came to India to buy their products. Until the invention of machinery in the eighteenth century India was, from a purely economic point of view, in a more advanced position than the leading countries of Europe. We have said enough to show that the exclusive preoccupation of the Hindu mind with religious and metaphysical speculation is a myth, and it is interesting to observe that our economic backwardness since the eighteenth century coincides with an equal backwardness in the realm of religion and philosophy. Again, to attribute the economic backwardness of the country to preoccupation with religion and philosophy, exaggerates their influence on economic activity. Jesus Christ himself declared that it was easier for a camel to pass through the eye of a needle than for a rich man to enter the gates of heaven; but that has not prevented the followers of Christ from becoming past masters in the art of grabbing money. \ The faith of the educated Indian in religion generally, and the traditional religion in particular, is by no means excessive and it would be obviously incorrect to attribute his economic backwardness to his religious preoccupation. And as for the uneducated Indians, who strongly believe in the traditional faith, it is interesting to observe that it is precisely those communities whose religious orthodoxy is the greatest, such as the Marwaries, the Jains, and the Bhatias among the Hindus, and the Khojas, the Memons and the Bohras among the Mohommedans, which produce the most enterprising traders and industrialists in India. The conclusion is obvious: religion does not play such a predominant part in economic activity as is attributed to it, and the economic motive is much stronger than the religious motive. We must look elsewhere for the causes of our economic backwardness.

Indian Fatalism.1 In spite of what has been said above it must be conceded that competent observers, both Indian and foreign, have been struck with the predominantly pessimistic and fatalistic note in Indian life, and we may take it as a fact. But the problem which concerns us is whether it is this fatalism which determines our economic backwardness or whether it is our economic backwardness which produces this fatalism. To a certain extent of course each must react on the other, but we believe that fatalism is more the effect than the cause of our economic backwardness. This same fatalistic attitude prevailed in Europe before the industrial revolution when epidemics and famines were taken as manifestations of divine wrath before which man must quietly submit. It is the change of environment in Europe which has changed the outlook of man, and given a similar change of environment in India, the same results would follow. Foreign rule is probably the most depressing experience to which a country can be subjected, and it has undoubtedly contributed very substantially to the pessimistic and fatalistic attitude towards life which the Indian suffers from. The new political outlook has. in a measure, changed this attitude for the better, and with the attainment of Swaraj the spirit of the people will be transformed. Again, India at present is a predominently agricultural country, and the vagaries of the monsoon, which are beyond man's control, determine the well-being of the people. Naturally man feels helpless and pessimistic in the face of forces too strong for him. But given an adequate diversification of industries, with agriculture occupying its proper place, the Indian will never feel so weak and helpless as he does at present, because the nightmare of famine and scarcity will disappear from the land. The recurring epidemics in the country, which take such a heavy toll of human life, are entirely preventable, and their disappearance would make a world of difference to the self-confidence and optimism of the people. The crushing poverty of the people, on account of

¹ Cf. Jather & Beri · Indian Economics, Vol. I, pp. 114-15.

which the vast majority of them are living eternally in dread of hunger, cannot but crush all joy of life out of them; and yet there is hardly any doubt that an efficiently planned national economy can make this haunting fear of hunger and poverty things of the past. The numerous disabilities imposed on the lower castes in a caste-ridden society constitute another factor for our pessimistic outlook, but a vigorous campaign is proceeding against these unjust disabilities which are in the process of disappearance. It is no wonder that under the pressure of this extraordinary combination of adverse circumstances Indian philosophical ideas have been misconstrued in a pessimistic fashion. Nothing can be more vitalizing than the doctrine of "Karma," which literally means action, and according to which man's destiny is determined by his own actions and there is no dark or mysterious fate which unjustly drives him to his doom. And yet this noble doctrine of "Karma" has been misconstrued to mean that man is helpless in the grip of his fate and action is useless. Fortunately, the process of reinterpretation of these ideas is actively going ahead, and with a drastic change in the economic and social environments we shall have seen the last of these vicious misinterpretations. A planued economy for a country is accepted as a common-place to-day and one of the greatest results of planned economy in Russia has been a revolutionary change in the psychology of the people. Competent observers who visited the country both before and after the economic revolution tell us that they found it difficult to believe the transformation which they witnessed with their own eyes. We are convinced that an equally revolutionary change will occur in the psychology of our people when a planned economy for the nation as a whole is carried out. What appear at present as insurmountable difficulties will automatically disappear with the drastic changes in the environment. Finally, our social and religious institutions ultimately will not be a bar to the fulfilment of our economic destiny.

CHAPTER III.

THE PROBLEM OF POPULATION.

Total Population and Density. The total area covered by the last (1931) census is 18 hundred thousand square miles and the population inhabiting it is 353 millions, giving a density for the whole area of 195 persons per square mile. The Indian states have a population of 23%, and if Burma is excluded, 24%. The total population of the world is estimated at 1,850 millions and the population of India forms almost one-fifth part of that of the whole world and is greater than that of any other country. The density of the Indian population is a very variable factor, ranging from 9 persons per square mile in Baluchistan, where the Chagai district has only one person to the square mile, to about 2,000 persons per square mile in the most thickly populated parts of the southwest coast. The general density of Cochin State including the almost uninhabited highlands, is 814.2 persons to the square mile, reaching in one village the amazing maximum found in any purely rural population of over 4000 persons to the square There is, however, in Bengal an even higher general level of density, since the Dame Division has a mean density of 935 persons and reachemental density of 3,228 per square mile for Lohajang thana and a mean density of 2,413 for Munshigani sub-division. The density of population varies largely according to the rainfall, and in the densest areasthose of Cochin, of eastern Bengal, the north-east of the United Provinces and of Bihar-the rainfall is heavier than in any other part of India except Assam, where large tracts of hills and forest reduce the population in proportion to the area, and in south Burma, where there is considerable room for the increase of population, and where also there are considerable areas of forest and hills. Large stretches of level lands also contribute to the density of the population. Comparing the density of population in India with that in some other parts of the world, we find that England and Wales has a density of 685, U. S. A. has a density of 41, Europe as a whole 127 and China as a whole 80.5. One obvious conclusion emerges from this comparison: we cannot estimate the economic position of a country from a mere consideration of its average density. A highly industrialized and commercial country with intensive cultivation shows the largest density; a purely agricultural country supports a very much smaller population; the pastoral stage supports a lesser number and the hunting stage lesser still. So in addition to density we must consider the occupation of the people and their standard of living before we can form some idea about their economic position.

The Provincial Distribution of Population. The average density of population in India does not indicate the great differences in the provincial distribution of population as by the table ΩĦ the following page. Delhi forms an exceptional cases with a small area large urban population, and its increase of 30.3% between 1921 and 1931 and its density of 1,110 per square mile does not call for any special comment. Baluchistan, Andaman and Nicobar Islands and Coorg are not typical of India. Among the other provinces. Bengal with a density of 646 per square mile is by far the most thickly populated and such a density, which is equal to that of a highly industrialized and commercial country, in a predominently agricultural province like Bengal, can only mean great poverty and a low standard of living. It has been calculated that agriculture under the best conditions cannot maintain more than 250 persons per square mile at a reasonable level of comfort, and the agricultural conditions in Bengal are not of the best. On the other hand Burma, which has the largest area and is nearly twice as big as the next largest province, has the smallest density of only 63 per square mile, and with its agricultural, mineral and forest resources it can admit of a much larger population. Assam with its 15.6% registers the largest percentage of increase between 1921 and 1931 and the United Provinces with 6.7% has the smallest percentage of increase.

Population of British India distributed by provinces and with variation per cent in the population from. 1921 to 1931 and mean density per square mile according to the Census of 1931.

Name of Area				_		
	Area in sq miles	Persons	Males	Females	Percentage of variation between 1921-31 Increase +, Decrease -	Density per sq mile
A imer-Meru ara	2,711	560,292	296,081	264,211	+131	202
Andeman Vicobar Islands	3,143	29.463	19,702	19.761	so +	5
Askattı	55,014	8.622.251	4.537.206	4,085,045	+156	157
Refuchieten	54,228	463.508	278.004	193,504	+102	6 3
Henry	77,521	50.114.002	26.041.698	24,072,304	+ 73	949
Riber and Origin	83,054	37.677.576	18,794,138	18,883,438	+ 10 8	4
Bombay (including Aden)	123,679	21 930 601 \$	11,535,903	10.394.698	+133	171
	233,492	14.667.146	7.490.601	7,176,545	+110	8
Central Proxinces and Berar	99,920	15,507,723	7.761.818	7,745,905	+115	155
	1,593	163.327	90.575	72,752	- 03	103 2
Delh	573	636,246	369,497	266,749	+303	1,110
Madras	142,277	46.740.107	23.082,999	23,657,108	+104	88
North-West Frontier Province	13,518	2,425,076	1.315,818	1,109,258	+ 77	£
Puttiab	99,200	23 580,852	12,880,510	10,700,342	+140	238
Chiffed Provinces	106,248	48.408.763	25,445,006	22.963.757	+ 67	456
British India	1,096,171	271.526.933	139 931,556	131,595,377	+100	248
Indian States	712,508	81 310.845	41 897,367	19,413,478	+128	114
	1,808,679	352,837,778	181,828,923	171,008,855	+106	195

Distribution of Population according to Religion. We shall next consider the distribution of the population into the various religions. Strictly speaking religion is not the concern of the student of economics, but in India it plays a considerable part in the political, social and the economic life of the people and so we must take cognizance of it. The following table taken from the 1931 census gives the relevant figures.

Religion		tual Number in 1931 po's omitted)	Percentage of the total population	Percentage of variation hetween 1921 and 1931, Increase + Decrease —
Hindu	•••	239,195 000	68.24	+10.4
Jain		1,2520 * "	36	+6.2
Buddhist	•••	12,787	3.65	+ 10.5
Sikh		4,336	1.24	+ 33.9
Zorastrian		110	.03	+7.8
Muslim	•••	77,678	22.16	+13.0
Christian	,	6,297	1.79	+ 32.5
<u>Iew</u>	•••	تحسیمن 24	,01	+ 10.9
Tribal		8,280	2.36	- 15.3,
Minor relig	ions			`~~
and relig	ions			
not returns	ed	571	.16	+ 3072.6

The largest increase is registered by the Sikhs and the Christians, the case of minor religions and not registered being exceptional. The percentage of increase among the Mohammadens is 13 as against 10'4 among the Hindus.

Rural and Urban Distribution. The next distribution of the population, that between rural and urban, is far more important and interesting from the economic point of view. The definition of an urban area is the first point to be considered. The Census Code provided for the treatment as a town of every municipality, all civil lines not included in municipal limits, every cantonment and every other continuous collection of houses, inhabited by not less than 5,000.

persons, which the provincial census superintendent considered should be treated as urban. This is a very generous definition of a town, but even so the total percentage of the population classified as urban was only 11%, showing an increase in its proportion to the whole of only 0.8% since 1921. As against that we find that the population classified as urban in some other countries is 49% in France, 53.7% in Canada, 56.2% in the U. S. A. and 80% in England and Wales. number of towns in India is 2,575 while the rural areas, where the bulk of the people live, register a vast total of 696,831. Only 38 towns have a population which is 100,000 and over and 674 of our towns have a population of less than 5,000. India is predominently a rural country and the typical Indian is the villager. Urbanization is proceeding at a snail's pace and the pace of urbanization roughly indicates the progress of industrialization. The distribution of population between town and village in India is very unhealthy and except under a vigorously pursued planned Leconomy, which can quickly develope industry, transport and trade, it is not capable of any quick and easy adjustment. The progressive elements generally emanate from the towns and the paucity of towns in India is greatly responsible for the general backwardness in the country. It is interesting to observe that the urbanization in the country, however meagre, is again unevenly distributed and ranges from 3.4%, which is the urban population in Assam, to 22.6% in the Bombay Presidency. During the decade 1921 to 1931 the greatest increase in the percentage of the urban population has been in the Puniab.

Distribution of Population according to Workers and Dependents. The proportion of the total population maintained by the various occupations corresponds closely to the proportion of workers in each of these occupations, but it is interesting to observe that the proportion of actual workers to non-working dependents which was 47:53 in 1911, 46:54 in 1921 is only 44:56 in 1931.* This steady decrease in the proportion of

^{*} Census of India, 1931, Vol. I, p. 275.

workers to dependents is very disquieting, and while it is partly due to the fact that the proportion of children to adults. and therefore of dependents to workers, is higher than it was in 1021, we believe it indirectly reveals the growing unemployment in the country. And this is further supported by the fact that almost all occupations register a steady decline. No effort has been made to collect the statistics for unemployment in the country and it is only indirectly and inferentially that we can form some idea about it. In addition to the fact that the average cultivator in India is unemployed for half the year, it is clear that during 1911 to 1931 the burden on the worker has increased by the support of over ten million more dependents, the bulk of whom are unemployed. And while his burden has increased, the catastrophic fall in prices has reduced his income substantially. The wonder of it is that he has not broken down but still continues to exist.

Distribution of Population according to Occupation. The following table gives the percentages of different occupations for 1011, 1021 and 1031.

Occupation		1911	1021	1931
Exploitation of Animals	and			
Vegetation		72.44	73.15	67.0
Exploitation of Minerals		.17	.17	.1
Industry		11.27	10.49	9.7
Transport		1.6	1.37	1.5
Trade	•••	5.69	5.73	5.4
Public Force		-77	.69	-5
Public Administration		.84	.84	.8
Professions and Liberal A	rts	1.70	1.50	1.7
Persons living on the	neir			
income	•••	.17	.15	.14
Domestic Service		1.47	1.44	7.08
Insufficiently described				
occupations		2.95	3.5I	5.05
Unproductive	•••	1.10	1.04	1.05

A word may be said about one or two peculiarities in the percentages of 1931. The most striking changes are in the figures for the exploitation of animals and vegetation which are lesser by about 6%, and the figures for domestic service which are greater by about 6%, but as the census report points out, the figures for domestic service in 1931 has been unnaturally swollen by return of females in agricultural families as engaged in domestic service. The change is "apparant rather than real."* The figure for insufficiently described occupations also shows a considerable increase and that, we venture to think, is due to the prevailing unemployment. But the most remarkable change in occupation which the figures of the last census report reveal is among agricultural labourers. In 1931 there were 407 agricultural labourers to every 1000 cultivators, as compared with 291 in 1921.+ means that an extraordinary change in our rural population has taken place during the last ten years. On account of the increasing pressure of the population on the land, a considerable number of people have been squeezed out of possession of their lands and their number tends to grow. This substantial increase in the class of landless labourers in the rural areas is likely to have very wide social and economic reactions. But apart from these peculiarities in the figures of 1931, the general picture is substantially the same and gives us much food for thought. Nearly three fourths of the people of India obtain their livelihood from agriculture and allied occupations which are largely dependent on such an uncertain factor as the This is sufficient to make our economic position monsoon. uncertain, lop-sided and unbalanced. The percentage of our population dependent on agriculture, overwhelmingly large as it is, has been steadily increasing from 61% in 1891, to 66% in 1901, to 72% in 1911, and to 73% in 1921. We cannot say precisely what is the position at present, as the figure for 1931 has been vitiated by mixing up domestic service and probably

^{*} Census Report (1931) P. 281.

[†] Census of India Vol. 1. p. 287-8.

insufficiently described occupations with agriculture; but the fact that the percentage of the people obtaining their livelihood from industry has been steadily declining from 11'27 in 1911, to 10.40 in 1921, and to 9.7 in 1931, and that there is no perceptible increase in any other occupation, justifies the interpretation that the tendency from 1891 onwards is continuing. and the huge percentage of the population dependent on agriculture is still increasing. The steadily decreasing percentage of people getting their livelihood out of industry is alarming; and it is necessary to add that the bulk of them are engaged in small, unorganized industries, while organized industries occupy only 114% of the people. Trade and transport together occupy only about 7% of the people, but even this small percentage has been declining a little. We can get a clear perspective of our position by comparing the percentages of different occupations in India with that in some other countries. While agriculture supports about three fourths of our people, in Great Britain and Ireland it supports only 11.6%. in Germany 28.6%, in U. S. A. 26.3% and in France 40.7%, which is about the highest figure for a progressive country. Again, while mining and industry support less than 10% of our people, in Great Britain and Ireland they support 56.8%. in Germany, 42.2%, in U. S. A. 33.4%, and in France 35.8%. Finally, while trade and transport in India support less than 7% of our people, in Great Britain and Ireland they support 13.1%, in Germany 13.4%, in U. S. A. 17.0%, and in France 9.8%. These figures are not all quite up-to-date, but it does not make any difference to our main conclusion, which is universally accepted, that the percentage of people engaged in agriculture is by far the highest in India, and the percentage of people engaged in mining and industry, and trade and transport, is by far the lowest. We have already explained that the overwhelming importance of agriculture in the country, and the comparatively negligible position of industry, trade, transport and mining is responsible for making our national economy weak, unstable and lop-sided; and the only solution is a

vigorously pursued planned economy which will sharply correct this maladjustment. In the last century Germany and Japan, whose economic position was not different from that of India, carried out this change in a surprisingly short period; and in our own days Russia, whose economic condition was practically identical with that of India, has perfected the technique of transformation to such an extent that a vigorous national government, which commands the willing co-operation of the people, can plan and carry it out within a decade. It has been already pointed out that the vast and varied natural resources of India would greatly facilitate the task of transformation.

Distribution of Population according to Age. We now proceed to consider the distribution of population according to age. The table on the following page shows the percentage of the age distribution of males and females of the Indian population by 10-yearly age groups for the 5 decades 1891 to This table reveals certain very interesting facts. Nearly 281/2 per cent. of the population in India is accounted for by children under ten, which is the highest proportion as compared with other countries. Moreover, the longevity of the Indian is very low as compared with the inhabitants of other civilized countries. The commonly accepted working age is between 15 and 60, but owing to climatic reasons, the great poverty of the people, and above all the excessive birth rate, the effects of old age are felt here much earlier than in Europe, and the working age in India is proportionately lower. The result is that the percentage of our working or effective population is much lower than in other countries, and is estimated to be only 44% according to the last census, as against 53% in France and 60% in England. From the economic point of view the main significance of age composition is the proportion of effective population to the total population, and in this respect we compare unfavourably with the other countries. A very disquicting feature of the last census report

^{*} The figures are taken from the Census Report of 1931, Vol. I, P. 86 but they have been converted into percentages for the sake of convenience.

Percentage of the age distribation of males and females by 10-yearly age groups

from1891 to 1931.

							j				
Age group	ž	1931	1921	21	P1	1911		61	1901	81	1891
	Males — — —	Males Females	Males	Males Pemales	Male	Male, 1 emales	·	Males	Vales Females	Males	Males Females
91-0	28 02	58 83	26 73	Z8 10 -	27 10	28 16		26 48	27.21	28 37	23 23
10_28	20 86	20 62	20 87	96 81	20 13	18 23		21 30	19 17	19 74	17 5.8
20—30	17 68	18 56	16 40	17 66	17 18	18 39	_	16 66	17 87	16 78	18 01
30_40	14 31	13 51	14 61	13 98	14 51	13 91	_	14 57	14 08	14 55	14 01
40—50	89 6	8 91	10 13	29 6	10 14	69 6		10 19	166	10 04	9 49
20—60	5 61	5 45	6 19	90 9	60 9	6 07		6 14	6 21	5 90	5 96
60-70	2 69	2 81	3 47	3.77	3 40	3 80	=				
70—over	1 15	52.	1 60	_ 1 08 T	1 45	1 75	<u>—</u>	4 66	55 55	4 62	5 73
Mean age	23 2	88	24 8	24.7	24.7	24.7	 -	24.7	25 1	24 4	24 9
•											
							-				

is that the mean age in India, low as it is, tends to decline, and the mean age in the case of females is declining more sharply still. An improvement in the standard of public health, apart from other reasons, is therefore an economic necessity and in the long run will more than pay for itself.

Distribution of Population according to Sex. We shall next consider the distribution of population according to sex in India. While the number of females to a thousand males in 1921 was 945, in 1931 it was only 940; and this shortage of females is considerably aggravated by the fact that a very substantial proportion of widows (who constitute 15% of the female population) live a life of enforced celibacy. Since 1901 there has been a steady and continuous fall in the proportion of females to males. The shortage of females, as compared to males, is a peculiar characteristic of the population of India and is in marked contrast to that of most European countries. As in other countries more boys than girls are born in India and the proportion in India is 108: 100 as against 105: 100 in England. The Census Commissioner agrees with the view of Westermarck, Heap and others that in-breading increases masculinity; and therefore the caste system, with its insistence of endogamy, is responsible for the excess of males in India. But this thesis is not supported by the fact that there is an excess of females in the caste-ridden South, and there is an excess of males in the North, and particularly in the North-West, where there is a preponderance of Muslims. Probably the true explanation is that in the regions in which the Mongolian and Dravidian race element is strongest, that is Burma, Madrie and Bengal, there is a higher proportion of females than in the areas of north and north-west India, in which the Aryan and Semetic strains prevail.* Biologically, the female infant is definitely better equipped by nature for survival than the male infant, and during the first year of life the death rate in India is 16.9% for females as against 18.7% for males. But conditions in India are

P. K. Wattal: The Population Problem in India, P. 14.

distinctly unfavourable to female life. The advantage the femiale has at birth is partly neutralised in infancy by comparative neglect, as daughters in India are unwelcome and in many parts of India they entail great pecuniary expense in providing for their dowries. Sons are everywhere desired, not sonly among orthodox Hindus, where a son is necessary to his father's salvation, but almost equally so among other communities as well. In addition to comparative neglect, the female is subjected to the purdah, which is prevalent among the higher classes in some parts of the country and particularly the Mohomodens, early marriage, and the strain of bearing children too early and too often. It has been rightly said that numbers of child wives march from the nuptial bed to the funeral pile. The working women, who constitute the vast majority, do not get proper rest before and after the delivery, and unskilful midwifery of the village dai is a further handicap against female life. It is therefore not difficult to understand the shortage of females as compared to males, and the progressive character of the shortage, which has been an alarming feature of the census reports since 1001, shows that there is no improvement as yet in the conditions of female life in the country.

Distribution of Population according to Sex in Urban Areas. Another peculiar feature of the sex distribution of our population is the great disparity between urban and rural areas. While in western countries the number of women in towns is greatly in excess of the men, in India it is exactly the opposite and the disparity is very considerable. For every thousand males, in Rangoon there are 477 females, in Calcutta 490, in Bombay 554, in Lahore 565 and in Madras there are 897. For urban areas as a whole the figure is 815) It is obvious that this shortage of women in the towns must adversely affect the health, comfort and the morals of the men. The reasons for this shortage are not far to seek. The men often leave their village fromes in order to get work in the towns and the women and the children stay behind. Besides, the number of women sugaged in urban industries is much smaller than that of men.

But on the other hand, contrary to expectations, the women workers form quite a substantial proportion of the female population, and this proportion compares very favourably with that in other countries. For example, while the percentage for England and Wales is nearly 26, in India it is nearly 30, and in various advanced countries it is much less. This shows that the number of women behind purdah is extremely small, and that cheap and facile generalizations about its general prevalence, based as they are on the experience of urban areas, are not supported by facts. It also gives an idea of the extent of poverty in India; because in India it is only when the family is faced with the prospect of going without the barest necessaries of life that its women folk go out to work, and that the great ambition of the working women in India is to join the ranks of the so-called purdah-nishin ladies.

Indian Birth Rate and Death Rate. India enjoys an unenviable notoriety among the civilized countries for her birth rate and death rate which are among the highest in the world. The following tables taken from the Public Health Commissioner's Report for 1931 fully substantiate this statement.

1. High Birth-Rate Countries.

Country.	An	nual birth-rate (1931)	Annual death-rate (1981)
Egypt		44.8	26 ⋅8
Japan		32.2	19.0
Roumania		33.3	20.8
Portugal		30.5	17-2
British India		34·3	24.9
Italy		24.9	14.8
Hungary		23.7	16-6
Spain		24·4	17-3

2. Low Birth-Rate Countries.

Country.	Annual birth-rate (1931)	Annual death-tate (1931)
New Zealand .	18.4	8-3
U. S. A.	178	11-1
Scotland .	190	13.3
France .	17.4	16.3
Germany	160	II 2
Sweden .	148	12 5
England and V	Vales 158	123

It seems that while birth and death rates are high in Asiatic countries and Eastern and Southern Europe, both are low in Northern and Western Europe and the United States of America. There is a very intimate relationship between the birth rate and the death rate and both rise or fall simultaneously. With the sole exception of Egypt, India has the highest birth rate and the highest death rate, and our birth rate and death rate are more than double that of England. The high birth rate is the major cause of the high death rate and, as in other countries, until the birth rate is substantially reduced, there will be no substantial reduction in the death rate. middle of the nineteenth century the birth rate and the death rate in England were similar to those in India to-day; for example the birth rate in England during 1851-55 was 33.9 and the death rate was 22.7, while for 1931 the birth rate in British India was 34.3 and the death rate was 24 9. And for 1932 the birth rate in England is 15.3 and the death rate is 12.0. If the Indian birth and death rates were reduced to the English level, it would result in a reduction of over 61/2 million births and over 41/2 million deaths annually. It is difficult to imagine the tremendous amount of avoidable pain and suffering which the high birth rate and the death rate entail on the country. Every birth and every death must entail some expenditure, however small, and multiplied by so many millions it comes to a substantial amount, which is taken out of the pittance which constitutes the average income. As the high birth rate must

inevitably be followed by a high death rate, except under particularly favourable circumstances which are conspicuous by their absence in India, the only return for this expenditure is an endless procession from the cradle to the grave. The figures of our birth rate and death rate are full of living tragedy if behind the statistics we peep into the realities of life in India. And in order to reduce the death rate in the country, the first and most important step to be taken is to reduce the birth rate, which must be the starting point for tackling the problem of population in India.

Infant Death Rate. The death rate in India is bad enough but the infant death rate is much worse and in the big cities it is something awful. Out of every 1,000 infants born as many as 179* die within the first year of life. This records some improvement as the corresponding figure for 1911 is 250. The following table gives the figures for infant mortality per 1,000 births in important Indian and European cities in 1931.

Indian city.	Infant Mortality.	Ruropean city	Infant Mortality.
Bombay	274	London	66
Calcutta	244	Berlin	გვ
Madras	251	Paris	93
Rangoon	278	Madrid	102
Lucknow	266	Budapest	114
Nagpur	323	Amsterdam	37
Delhi	202	Oslo	23

Comment is superfluous, and we may derive what comfort we can from the fact that not long ago infant mortality in European countries was as high as it is in India to-day, and has been steadily reduced to its present figure. In England, for example, in little more than 50 years it has been reduced from 149 to 60. While the highly insanitary conditions of child birth, the poor midwifery and the marriage of immature girls make a heavy contribution to infant mortality, the root of the

^{*} Public Health Commissioner's Report, quoted by P. K. Wattal: The Population Problem in India, P. 60.

matter is that until the high birth rate is substantially reduced we cannot expect to solve the problem of heavy infant mortality. The following table, which gives the figures for birth rate and infant mortality in the Indian provinces, generally supports the statement that a high birth rate is followed by a high infant mortality.

Province		В	rth Rate (1931)	Infant mortality per 1000 Births (1931)
C. P.			44.5	261.2
U. P.			35.6	189.1
Madras			35.5	186.6
Punjab			42.7	178.3
Bengal			27.8	174.0
Bombay	•••		36. r	161.6

Experience in western countries shows that a fall in birth rate is followed by a fall in death rate which is equal, if not greater, so that the survival rate is unaffected. The only result of restricting the birth-rate will be that we shall save the terrible waste of life now going on, and shall ensure a decent and normal life for the fewer but fitter children that will be born. At present the average number of children born per wife in India is 4.2 and the survival rate is 2.9.* If only the average number of children born were reduced to 3 per wife, we shall have made a long stride onwards. It will mean a birth rate of 20 and a death rate of 16. As the death rate at present in Travancore State is 16, it should not be beyond the capacity of the rest of India. But a beginning must necessarily be made in reducing the birth rate.

Female Mortality at the Reproductive Ages. The high female mortality at the reproductive ages (15 to 40) is another outstanding feature of our death rate. The following table+ was complied by Sir John Megaw in 1933 after a wide enquiry and shows the maternal mortality per 1,000 births in the different Indian provinces.

^{*} Census Report (1931), P. 206.

[†] Quoted by Wattal: The Population Problem in India, P. 69.

Province.	Mater per :	nal Mortality 1000 Birtha.
Assam		26.40
U. P		18.00
C. P		8.18
Madras		13.24
Bengal		49.16
Bihar & Orissa		26.57
Punjah		18.73
Bombay		20.00
British India (averag	ge)	24.05

The maternal mortality in C. P. is much lower than in any other Indian province and the rate for Bengal is incredibly high. In order to realize how high is the maternal mortality in India, we must bear in mind that in England great concern is expressed because the rate continues to be 4.11 per 1,000 births. Strenuous efforts are being made to reduce it by 50%. Another way of realizing the implications of the Indian rate is that 10% of girl wives die in child-birth, and every year about 200,000 mothers in India die in giving birth to children.

Expectation of Life. While the expectation of life in European countries has been showing a substantial increase owing to better conditions of life, the eradication of several preventible diseases, and above all the fall in the birth rate, no such corresponding improvement has taken place in India. The following table shows the expectation of life at birth in India and the different European countries and Japan; and the comparison is adverse to India at every subsequent age as well.

Country	Ma	le at birth.	Female at birth
India*	 •••	26,91	26.56
Germany (1924-6)	 	55-97	58.82
Sweden (1921-5)	 •••	60.72	62.95

^{*}According to the Census of India, 1931, Vol. I. P. or. footnote. The figures for the other countries are published by the Institute of International Statistics quoted by P. K., Wattal: The Population Problem in India, P. 80.

Country	Male at birth.	Female at birth
England and Wales (1920-22)	55.62	59-58
France (1920-1923)	52·19	55.87
Japan (1921-1925)	42-об	43-20

Before 1876, when the fall in birth rate set in, the average length of life in Western Europe was only 35 years. During the last forty years the expectation of life in India has increased only by one year.

Public Health and Malnutrition. It is only to be expected that in a population with such a high death rate and an alarmingly low expectation of life, there must be a large amount of sickness and malnutrition. Regarding sickness, it has been estimated that the daily average number of sick persons per 1,000 inhabitants is 10 in New Zealand, 30 in England and 84 in India.* Malaria prevails throughout the greater part of India and is responsible for nearly a third of the deaths, a hundred million sufferers, and an annual economic loss which is estimated by Colonel Chopra, I.M.S., at about Rs. 33 crores.* And malaria is a preventible disease. According to a resolution passed by the All-India Conference of Medical Research Workers in 1926, the average number of deaths resulting every year from preventible disease is about 5 to 6 millions, the average number of days lost to labour by each persons in India from preventible disease is not less than a fortnight to three weeks in each year, the percentage of loss of efficiency of the average person in India from preventible malnutrition and disease is not less than 20%, and the percentage of infants born in India who reach a wage-earning age is about 50 whereas it is quite possible to raise this percentage to 80 or 90. The conference was, "absolutely certain that the wastage of life and efficiency which result from preventible disease costs India several hundreds of crores of supers each year" in addition to the incalculable suffering of the millions. Sir John Megaw estimates that 30 per cent of

^{*} P. K. Wattal: The Population Problem in India, P. 74 to 75.

the population of India is well nourished, 41 per cent poorly nourished, and 20% very badly nourished.* In other words 61 per cent of the population is suffering from malnutrition. For Bengal the figure for malnutrition is 78 per cent.

The Marriage Rate. † The main reason for the high birth rate in India is the practical universality of marriage and the absence of any preventive checks. The table on the following page, taken from the last census report, t gives us the distribution by civil condition per 1,000 of each sex at different ages. Like our birth rate and death rate, our marriage rate is among the highest in the world. Our social and religious customs enjoin marriage and the begetting of children; and in the present primitive conditions of our society a wife is regarded as a necessity for performing household duties and as a help-mate to the husband in the fields. The rarity of widow marriage among the Hindus acts to some extent as a check on the growth of population. But the most striking feature of the figures for 1931, as opposed to the figures for the last half a century, is the extraordinary increase in the number of marriages of those aged o-15 which is illustrated by the following table.

Number of married per 1,000 of those ages 0-15 years §							
Sex	1881	1891	1901	1911	1921	1981	
Females	187	170	162	156	144	181	
Males	b3	59	59	54	51	77	
It will be	seen that fro	m 1881	to 19	21 the	e has	heen a	
steady decrease in the number of those married under the age							
of 15 years. This decrease has become an increase between							
1021 and 1931, for the number of married males under 15 has							
risen by 51% and the number of females married under 15 by							
26%, an increase which is undoubtedly due to the enormous							
number of infant marriages which took place in the six months'							
interval between the passing of the Sarda Act and its coming							

^{*}P. K. Wattal. The Population Problem in India, P 74 to 75

⁺Cf. Indian Economics-Jathar & Beri Vol I, P 49.

[‡] Census of India (1931) Vol. I, P. 239.

[§] Census of India (1931) Vol I. P. 215.

1
į
i
ij
ï
1
Š
45
و
0
9
푎
Ü
Ī
Ü
Ã,
Ę
Ħ
퉏
. <u></u>

			Condition per	Courseason by Cryll Condition per 1,000 of each are at 1:2		: W	
Males (age)	Unmarried	Матпед	Widowed	I emale, (age) Unmarried	Unmarried	Merent Ages.	
Average	479	467	75		¦ ¦		w idowed
I	88	ā	;	verage	382	483	155
5-10	3 5			9 - S	696	30	
} ;	816	2	0	5—10	805	193	и
10-15	847	149	4	10-15	609	<u> </u>	י י
15-20	553	434	13	15—20	148	3 5	2
20-30	255	713	Ŋ	20-30	: :	20	*
30 -40	74	829	29	3 5	‡ :	80 70 80 70 80 80 80 80 80 80 80 80 80 80 80 80 80	78
40 60	\$	807	153	. 9 . 9	: :	171	212
60 and over	ĸ	646	22	} '	=	482	207
		}	770	60 and over	10	188	802

into operation. So the Child Marriage Restraint Act has immediately resulted in increasing enormously the number of child marriages, and though its consequences in the future are likely to be beneficial, the moral seems to be that the education of general public opinion is far more important than mere legislation for improving our social customs and institutions. Among the consequences of early marriage may be mentioned the lower weight of the average baby, the greater incidence of still-birth, loss of fecundity, greater maternal and infant mortality, and the large number of child widows. Even in India, which is full of pathetic sights, there is nothing more pathetic than a child widow, doomed to a life of enforced celibacy because of stunid and vicious social customs. Bihar and Orissa, which has the unenviable distinction of being the worst sinner in respect of early marriage, records 150 infant widows less than a year old. Out of a total population of 171 million females in the country, there are 26 million widows, which gives a percentage of 15. The normal percentage in European countries is only 7. The position among the Hindus is much worse than among the Muslims. There is some comfort in the fact that the percentage of widows is steadily decreasing. The figures are given below.

Year	V	Vidows per	1000	females
1891				17.6
1901	(Famine year)			18·o
1911		•••	•••	17.3
1921	(Influenza Epi	demic)		17.5
1931	***	•••		155

One extraordinary feature of the figures for married persons according to the last census report is that there are 601,244 wifeless husbands (84,208,467 married males and 83,607,223 married females). This phenomenon appears for the first time in the Census of 1931, as at all previous censuses the proportion of married females has been greater. Dr. Hutton, the Census Commissioner, attributes it, not to polyandry or incorrect returns, but to the Sarda Act on account of which parents in many cases described their married daughters as unmarried in

order to avoid the risk of prosecution. According to Dr Hutton the number of such married girls who were returned as unmarried is not less than a million and a quarter The next census will show how far this conjecture is correct

Fertility. The results of the fertility enquiry conducted, under considerable handicaps, in connection with the 1931 census are quite interesting. The number of families examined was limited and some of the returns were unsatisfactory. The following table taken from the Census Report* gives the average size of family co-related with age of wife at mairrage

Wife married at	Number of families cxanuned	Number of cluidren born alive	Average bserved.	Number of children surviving	Average observed
All ages	568,628	2,368,172	4 2	1,661,448	29
0-12 vears	40,729	154,120	38	112,127	28
13-14 \ears	191,783	809,891	4 2	552,345	29
15 19 veats	249,874	1,022,209	4 1	726,118	29
20-29 Years	75,758	328,181	43	232,804	3 1
30 years and over	10,484	53,771	5 1	38,059	36

It is obvious from the above table that the number of children born and the survival rate seems to increase with the age of wife at marriage. Contrary perhaps to the general expertation, the fertility of the Indian woman compares unfavourably, for example, with the English woman, in spite of the extensive use of contracentive methods in England. For every 1,000 of the female population in British India aged 15-40 years the birth-1ate for 1931 is 1692 The corresponding figure for England and Wales (1920) is 200. The fertility of the Muslims is definitely greater than that of the Hindus, and during the last fifty years their numbers have increased by 55% as against 268% for the Hindus The birth rate among the Muslims is higher than among the Hindus and the death rate is lower. Other causes for the greater Muslim fertility are the comparative absence of child marriage among them, the absence of restrictions on widow marriage and a more nutritious diet.

^{*} P. 206

Size of Families by Occupation of Husband. It is quite interesting to study the figures for the size of families by occupation of husband. These figures must be taken with a certain amount of caution as the number of families examined for the purpose has been limited. But assuming that the small number examined is representative, we got certain very interesting results. The highest number of children per head, that is 5.2, is found in the profession of religion. It is rather difficult to trace the exact connection between the religious profession and the largest number of children, though we believe that in the last century clergymen in England were found to be, equally prolific. Religion is bracketted with the occupation of transport by water. The next highest number of children, 5 per head, is produced by persons living on their income. In their case, it seems, that being relieved of the trouble of earning their livelihood, they utilize their energies and serve humanity by large scale procreation. We may derive what comfort we can from the fact that such a scale or procreation, coupled as it is with a high rate of survival, will result, under the Indian law of inheritance, in a quick distribution of the property. The smallest number of children per head, 3.5, is under the occupation of transport by rail, and the army has 3.6 children per head. The professions of medicine, law and education have 3.7 children per head and are bracketed with the police and textile workers. But the survival rate for the medical and other professions, 76 per cent, is the highest, and apparently physicians, if unable to heal themselves, can yet heal their children. It seems in general that both physical and mental exertion result in comparatively small families. The average for all occupations is 4.3 children per head, and that for people engaged in the production of raw materials, who constitute about three fourths of the total population, it is 4.4.

Overpopulation. During 1921 to 1931 the population of India increased by nearly 34 millions, a figure approaching equality with that of the total population of France or Italy, and appreciably greater than that of Poland and Spain. As we

have already seen, our birth rate, death rate and marriage rate are among the highest in the world. Marriage in India is universal and early marriage is the rule. The existence of preventive checks in the country is conspicuous by its absence, and the population is mainly restrained by the operation of the positive checks. There has been no marked improvement in the economic condition of the country, and with the substantial fall in agricultural prices, a sharp deterioration has set in. The remarkable increase among the agricultural labourers, and the considerably higher ratio of dependents to workers, point in the same direction. The power of resistence to disease among the people is very small and, with the sharp fall in agricultural prices and growing poverty, it is becoming lesser still. Over 60% of the population lack nutrition, and the infant mortality is extraordinarily high The conclusion cannot be resisted that the country is overpopulated, and the increase in the population is a cause for alarm. Unfortunately, the discussion of the problem of population in India has been vitiated by political bias. On the one hand the Government is inclined to overemphasise the importance of nurestricted multiplication of numbers in India, and to use it as a screen for their hopeless failure in improving the economic condition of the country. while on the other the non-official view is inclined towards minimising the dangers of unrestricted increase in population, absolving the people and putting all the blame on the shoulders of the Government. The student of Indian economic problems must endeavour to hold the scales even, and while the official cannot be absolved from his hopeless failure in connection with the general economic position, the people of India must be held primarily responsible for their unrestricted multiplication. which is undoubtedly an important factor in their sad economic plight. On the basis of the actual production of wealth in the country, overpopulation may be taken as an established fact : and any decrease in the population would result in a much lesser decrease in the production of wealth, and the income per head would record some improvement. Though our population has only recently recorded an increase of nearly

34 millions, our weak economic position has been further seriously weakened by the sharp fall in agricultural prices, the small disease resisting capacity of the people has been further lowered, and it is not unlikely that widespread epidemics may result as a consequence.

Remedies for Overpopulation. Different remedies for solving the problem of overpopulation have been put forward. Among these may be mentioned emigration and inter-provincial emigration, a substantial increase in the production of wealth by large scale industrialization and an agrarian revolution, and birth-control either by means of moral restraint or by the use of contraceptives. We shall discuss these remedies in detail.

Emigration. Adam Smith remarked long ago that of all sorts of luggage man is the most difficult to be transported. According to the last Census Report the actual number of emigrants during 1921-31 is one million, which means that about a hundred thousand persons leave the country each year. The annual growth of the population is three millions and consequently the relief afforded by emigration is infinitesimal. Even as it is, the prospects of its continuance on the present scale are not reassuring. The two most important countries for Indian emigration at present are Ceylon and Malaya. In Ceylon there is a strong feeling against the Indian emigrant and there is no reason to differ from the view of the Census Commissioner that "the absorption of Indian labour in that country has nearly reached the saturation point." In Malaya from 1931 to 1932 the total Indian population has been reduced by over a hundred thousand, and at present the value of Malaya as a field for Indian emigration is practically nil. The British Dominions are practically all closed to Indian immigration. Incidentally it might be mentioned that according to the World Economic Survey, in the years of depression since 1929, emigration everywhere has dwindled almost to nothing. In 1931 U. S. A., which ordinarily received about 700,000 immigrants from Europe annually, admitted only 43,000 immigrant aliens and 80,000 aliens left the country. For the first time in modern history (apart from the war years) Britain had an inward balance

of 37,000 in 1931 and 50,000 in 1932. In spite of its apparent attractiveness, therefore, emigration cannot be regarded as a dependable remedy for over-population in India.

Inter-Provincial Migration. The scope for immigration within India is confined to Burma and Assam. There is a considerable movement of the population from Madras, Bengal and II. P. to Burma, as the indigenous population will not do menial work and is willing to pay for those who will do it. Madras supplies the major portion of the labour requirements of Burma. But the prospects of Indian immigation are not very bright as the cry of "Burma for Burmans" is now becoming popular, and with the separation of Burma which may be taken as certain, it will gather strength. In a memorandum submitted to the Parliamentary Select Committee, Sir Samuel Hoare made it clear that he considers it necessary to arm separated Burma with power to regulate the entry of Indians. The total number of Indiaus in Burma at the 1931 Census was a little over six hundred thousand. There is considerable scope for emigration into Assam as out of 27 million acres available for cultivation only 8 million acres have been brought under the plough. Labour for tea-gardens is imported from Bihar and Orissa, U. P. and Bengal. The net gain of the province by migration was 1,140,752 in 1921 and 1,241,011 in 1931. Owing to the depression in the tea industry the volume of immigration is not very much on the increase, and the unhealthiness of the province due to the prevalence of kala azar, and the absence of facilities for communication, are additional discouraging factors. An attractive land colonization policy, however, would stimulate immigration, but the vested interests of the tea industry stand in the way, as few people would care to serve as coolies if they were given an opportunity of becoming landed proprietors on easy terms. With the completion of the Sukkur Barrage, Sindh also can provide scope for some immigrants from other provinces. But the sum total of the relief which interprovincial migration can give is entirely inadequate for absorbing our surplus population.

Increase in Production of Wealth. It has been suggested that a large scale industrialization of the country, and an agrarian revolution, would multiply the production of wealth in the country, and thus solve the problem of our surplus population. We shall consider in detail the question of industries and agriculture in the chapters on these subjects. Here it is only necessary to observe that a future increase in the production of wealth, however rosy, cannot justify the present increase in our numbers, which is nearly 34 millions during the decade 1921 to 31. So far as the immediate future is concerned, we have to bear in mind the fact that the gross value of the annual agricultural produce was estimated by the Indian Central Banking Enquiry Committee in 1931 at Rs. 1200 crores on the basis of the 1028 price levels. The fall in agricultural prices since then is estimated at not less than 50%, and so half the income of the agriculturists (who constitute about three fourths of the population) is wiped out. And their cash commitments in the shape of taxes, rent, interest, etc. have by no means been reduced in the same proportion. For the time being, at any rate, agricultural prospects are extremely gloomy, and it is quite impossible to justify the increase of numbers on that basis. Organized industries in India do not employ a total of more than 5 million persons, and it is entirely out of the question for our industries to absorb a surplus of 3 million people every year. It may be therefore taken as an established fact that agriculture and industry, as they stand at present and in view of the prospects in the immediate future, cannot solve the problem of surplus population.

Birth-Control. As the other remedies for overpopulation have failed, we may now proceed to discuss the only remaining alternative and that is birth control. If we cannot possibly provide for our fast increasing numbers, we must take steps to stop the increase of numbers. Birth-control may be divided under two heads: moral restraint and the use of contraceptives. There can be no question that moral restraint is far and away the best. It can be exercised either by postponing the

age of marriage until children can be afforded or by observing self-control within the married state. Under the head of "The Marriage Rate" we have shown that the Indian marriage rate is much heavier than elsewhere and early marriage in India is quite the rule. There is undoubtedly very considerable room for improvement in this direction, but for the time being, on account of the Sarda Act, a temporary reaction has set in and the last census report records an appreciable increase in the number of early marriages. It is difficult to say exactly how far self-control within the married state is exercised in India. but judging from our birth rate it is totally ineffective. It is very doubtful whether, in the intimacies of married life, selfcontrol can be exercised by the masses of mankind; and in discussing the issue we must face squarely the realities of our sexual nature. The problem of population fundamentally concerns the masses and self-control is a counsel of perfection which can be carried out only by the select few. We endorse the view of Mr. Bernard Shaw that, "the practical question for the mass of mankind is not whether the population shall be kept down or not, but whether it shall be kept down by preventing the conception of children or by bringing them into the world and then slaughtering them by abortion, exposure, starvation, neglect, ill-usage, plague, pestilence and famine, battle, murder and sudden death."* Self-control is not at present a practical solution for the problem of overpopulation so far as the mass of mankind is concerned.

Contraception: the Case for it. Contraception is the only remaining alternative. It is effective and it has succeeded in revolutionizing the birth-rate, and consequently the death rate, in Western Europe and America. Public health and the expectation of life record a very substantial improvement, and the positive checks on the growth of the population have largely disappeared. The standard of living has improved and while the problem of poverty has not been solved, poverty in

^{*} The Intelligent Woman's Guide to Socialism and Capitalism, p.

the West and in India exist on altogether different planes and there is hardly any comparison between the two. The average unemployed man in England is much better off than the average employed man in India. Contraception is only one of the factors which have brought about this change but it is an important factor. On an average every healthy human being has the capacity to produce a much bigger family than his means can permit, and this is specially true in India where the average income is very small. If the need for regulation of births be admitted, there is no alternative to contraceptive methods, which can also prevent diseased and unhealthy women from giving birth to children. Contraception is also effective in spacing children properly.

Contraception: the case against it. The number of arguments put forward against the use of contraceptives is large and varied. The militarists generally are against it and they argue that a country which takes to contraception will lose military power and commit race suicide. It is at least equally valid to say for the other side that the growth of population, unemployment and competition for markets lead to war, which is inevitable unless the growth of population is deliberately restricted. The argument that the use of contraceptives is "Unnatural" need not detain us here: for in order to live a perfectly natural life man will have to go back to the caves and forests. The next argument that the use of contraceptives results in local disease and constitutional disorders deserves more attention. In this connection it must be made clear that from the technical point of view a really satisfactory contraceptive does not exist; and the use of a faulty method is undoubtedly harmful. Expert medical advice can remedy this drawback. The aversion to the use of contraceptives is in many cases strong and genuine and is a factor to be reckoned with. There is also some religious feeling, particularly among the Roman Catholics, against contraceptives, but their advocacy of the "safe period", which is really not safe, is an illogical compromise. The strongest moral argument against the use of contraceptives is that it will give an impetus to promiscuity and immoral

living. The restraint imposed by fear may not be of a high moral order, yet the end which it serves is, by common consent, socially desirable. It must be admitted that in countries where a knowledge of contraceptives is wide-spread, there has been an increase in sexual promiscuity. A slight remedy is that knowledge about contraceptives need not be broadcast and may be imparted by responsible persons in suitable cases but that is really no solution. Contraception is liable to abuse, but there is hardly anything good in the world that cannot be turned to evil purpose, and ultimately it has to be judged by its use. Again, in the West, contraception is practiced in excess by the upper and middle classes and even by the skilled working classes. Dissatisfaction with the elementary pleasures of life and the craving after artificial stimuli and new sensations, have always been, and probably will always remain, the surest way to decadence in a race and as such should be combated. The improvident, unskilled masses at the bottom of the social edifice do not practice contraception, with the result that the population as a whole has a tendency to degenerate, and contrareption is dysgenic 1 ather than eugenic in its effect. We do not attach much value to the possibility of antenatal destruction of genius on account of the use of contraceptives. It has been urged that the use of contraceptives is beyond the pockets and much beyond the intelligence of the vast masses of the Indian people. This is a valid objection but it is equally applicable to medical treatment and education. Some inexpensive, fool-proof method will have to be devised before contraception can become popular in this country, and the state will have to take active measures in propagating it.

Progress in Birth Control in India. Of late increasing attention is being given to the question of birth control in this country and a definite movement towards artificial birth-control appears to be taking place. Not only is artificial control publicly advocated by a number of medical writers but Madras has a Neo-Malthusian League with two Maharajas, three High Court Judges and four or five men very prominent in public

life as its sponsors. It is a happy sign of the times that women have come forward and advocated birth-control. The Lucknow session of the All-India Women's Conference held in January 1933 passed the following resolution:

This Conference feels that on account of the low physique of women, high infant mortality and increasing poverty of the country, men and women should be instructed in methods of birth-control in recognized clinics. It calls upon all municipalities and local bodies to open such centres and invites the special help of the medical authorities towards the solution of this important problem.

Some important municipalities like Bombay and Karachi have discussed the subject which has evoked the powerful support of some influential newspapers. In 1932 the Senate of the Madras University accepted a resolution to give "a course of instruction in birth-control to all final year students in both B.A. Pass and Honours classes in every college within the jurisdiction of the University." In October 1933 the Covernment of Madras announced their decision to establish birth-control clinics in the Presidency. In the progressive state of Mysore birth-control clinics in the four principal hospitals have been in existence since 1930. While not minimizing the difficulties in the way, we feel that the birth-control movement has come to stay and will slowly but steadily make good. Some elementary type of birth-control, as for example prolonged lactation, prevails in the country; and while for obvious reasons nobody can determine the extent of abortion and infanticide, they are by no means absent. But the birth rate indicates that their combined effect is negligible, and at present the devastating torrent of babies sweeps everything before it.

Engenic Legislation.* It has been justly observed that while man has succeeded in making revolutionary improvements in plants and animals, there has been no corresponding improvement in man himself. Two difficulties stand in the way: men and women cannot be experimented with like plants

^{*} C. P. Blacker: Birth Control and the State.

and animals; and secondly, humanity is not agreed as to what is the type of man and woman it wants and perhaps is not competent to form a sound judgment.* While we cannot achieve any positive results, some negative action is possible and has been tried particularly in the United States. In the state of Nebraska marriage is forbidden to any one suffering from a venereal disease and Connectient forbids the marriage of epileptics and feeble minded persons. Montana provides for the compulsory sterilization of idiots, epileptics and feebleminded and insane persons. In males sterilization can be effected by a very minor operation and leaves quite undisturbed the sexual function though it destroys the power of reproduction. The number of sufferers from insanity, deaf-muteness, blindness and leprosy in India is over a million, and considering that marriage is the birth right of every man and woman in the country, it would be well worth-while to investigate the possibilities of this type of legislation.

Summary. We shall endeavour to sum up the discussion of the problem of population which has ranged over a wide area. The discussion is based on statistics but the defects of Indian vital statistics are notorious. The Madras Census Report refers to the recording of child-birth as a cause of death among men. All reports are not as bad as that and the Census Commissioner is of the opinion that taken on the whole "the defect in vital statistics is probably to be estimated at about 20%." Usually people fail to record births and deaths and the actual birth and death rates are therefore appreciably higher. India is a thickly populated country with a density of 195 persons per square mile which is much too high for a predominently agricultural country. The highly industrialized continent of

^{*}As Mr. Bernard Shaw puts it, "Considering that we poisoned Socrates, crucified Christ, and burnt Joan of Arc anud popular applause, because, after a trial by responsible lawvers and Churchmen, we decided that they were too wicked to be allowed to live, we can hardly that up to be judges of goodness or to have any sincere liking for it." Guide to Socialism, p. 54. It might be added that their modern prototypes are also treated more or less similarly.

Europe has a density of 127. Among the Indian provinces Bengal has the highest density of 646 and as Bengal too is predominently agricultural, it means abject poverty for the province. The vast majority of the people, that is to say 89%, live in rural areas and only 11% live in the towns. The statistics of unemployment in the country are not available, but the fact that the proportion of workers to dependents has been steadily falling from 47:53 in 1911, to 46:54 in 1921, and to 44:56 in 1937, clearly indicates that unemployment in the country is steadily increasing; and this is in addition to the fact that our vast agricultural population is unemployed for more than half the year. The percentage of our population who exist (one can hardly call it living) on agriculture, huge as it is, is still increasing; and the percentage of our population who live on industry, small as it is, is still decreasing. The number of agricultural labourers per 1000 cultivators has increased from 201 in 1921 to 407 in 1931, and this is the most remarkable change in occupation recorded by the last census report. The age pyramid in India has the broadest base, and children under ten constitute 28% of our population, which is the highest percentage anywhere. The percentage of our working or effective population is much lower than elsewhere. The proportion of women to men in the general population has been steadily falling, and the proportion of widows in the total female population also registers a decline. There is heavy mortality among females throughout the reproductive period. For British India maternal mortality per 1000 births is 24.05, while for England the figure is 4.11. Bengal has an incredibly high figure of 40 16. In the urban areas the number of males is much greater than the number of females. Our birth rate, death rate and marriage rate are among the highest in the world. Preventible disease costs the country hundreds of crores of runees each year. The infant death rate in the country in general, and the urban areas in particular, is extraordinarily high. The expectation of life in the country is less than half of what it is in some European countries. The percentage of the population in the country suffering from malnutrition is 61

and for Bengal the figure is 78. People following the profession of religion and those who live on their incomes have the largest number of children. The fecundity of girls married at ages below 20 is smaller than that of girls married at ages above 20; and the survival rate of the children of the former is much less than that of children of the latter. Of the female unmarried population or per cent. is below the age of 15. Fecundity is at the sacrifice of longevity. Emigration and inter-provincial migration hold out no prospects of relief for our surplus population, and neither is there any prospect of a rapid increase in our production of wealth in the near future. At present owing to a catastrophic fall in prices the income from agriculture has gone down very substantially. While the population is increasing rapidly, there is no corresponding increase in the area under cultivation, as practically the whole of the cultivable area is already under cultivation. Three-fourths of the agricultural population is in possession of uneconomic holdings. The percentage of the population engaged in industries has been steadily declining since 1901, and industries cannot possibly absorb a surplus population at the rate of about 3 millions each year. No rise in the present low standard of living is possible unless the population stops growing There is no alternative to the use of contraceptives of which a beginning, however small, has been made.

Conclusion. Our study of the problem of population reveals the tragic situation of the Indian people. The outstanding fact is that a very large proportion of our people are beset with poverty of a kind which finds no parallel in western lands, and are living on the very margin of subsistence. There is hardly any possibility of a substantial improvement in their condition in the near future, and yet their numbers are growing at a very rapid rate, and the increase of 10.6 per cent recorded during 1921-31 may be regarded as normal, in the sense that there was no great calamity to check the growth of the population. Preventive checks are non-existent and positive checks inevitably take their place. The standard of living is danger-

ously low and it is extraordinary how such large numbers manage to exist. The vast majority of the people in India are never far removed from the danger of starvation. The quality of the population is naturally very poor, and as Herbert Spencer said long ago, organisms multiply in inverse ratio to the dignity and worth of individual life. We have exhaustively discussed all the possibilities for relieving our surplus population, and have come to the conclusion that the use of contraceptives is the only possible solution. We consider contraception not as an ideal remedy but as a necessary and unavoidable evil. A beginning, however small, has been made. We fully realize that contraception at present affects only a small fraction of the educated classes, who constitute a microscopic minority in the country. The real issue is about the rvot and the labouring classes for whom the problem is most acute. The illiteracy, poverty, conservatism and lack of intelligence of the ryot, and a complete lack of organization for reaching him, are all major factors to be reckoned with, and their importance can hardly be exaggerated. But this is the only possible line of advance and must be pursued at all costs. The educated classes are a microscopic minority, but they weild a moral influence out of all proportion to their numbers. And if they are familiarized with the use of contraceptives their example may percolate down. The progress of industrialization and the inevitable change in the mentality of the people will undoubtedly be helpful in this connection. The example of other countries shows that the use of contraceptive methods, once it has had a start, has spread very rapidly; and we venture to hope that the same will be the case in India, where at present the people are going through a mad dance of birth, marriage, procreation, poverty, sickness and death, each quickly succeeding the other, and one generation treading on the heals of another. Whatever increase there can be in the production of wealth is urgently needed for improving the extremely low standard of living, and not for adding to the numbers of emsciated and hungry millions. It is about time that we diverted our energies from increasing the numbers of the population to improving its quality.

CHAPTER IV.

THE ECONOMIC TRANSITION IN INDIA.

The Importance of the Industrial Revolution. industrial revolution which started in England in the eighteenth century is by far the most important event in the economic history of the modern world. In industry the invention of machinery run by power steadily displaced handicrafts and brought into existence the modern factory system and a large scale urbanization of the population; in agriculture the wasteful mediaeval system of common-field husbandry gave way to the enclosure of land and the rotation of crops; in transport the atrocious character of the English roads in the seventeenth and early eighteenth century, to which every contemporary traveller hears idignant witness, was transformed by the turnpike roads and the navigable canals, which were followed in course of time by the steamship and the railway; in economic policy the detailed state regulations about the economic life of the people were displaced by the adoption of the policy of laissez faire which hastened the pace of the industrial revolution. The consequences of the industrial revolution were far reaching. The increase in the production of wealth was tremendous; there was a vast extension of trade, both internal and external; the population increased very rapidly; a very considerable number of people shifted from the rural areas in the south to the newly developed industrial cities in the north: the political power in the country gradually changed hands from the landed magnates to the industrial leaders; the domestic system was supplanted by the factory with its inevitable emergence of the capitalist and the wage earner and the clash between the two; and the voemanry gave way to the capitalist tenant farmer and the landless labourer. In short the whole social and economic basis of society was completely transformed.

The Industrial Revolution as the basis of the economic classification of different countries. Until the advent of the industrial revolution in England in the eighteenth century economic conditions in the different civilized countries of the world were more or less identical and there was no fundamental difference, for example, in the economic organization of India and England. But, as we have already pointed out, in a country which has gone through the industrial revolution the social and economic basis of society is completely transformed, and the industrial revolution forms the basis of the economic classification of different countries. "For the purpose of a rough classification, the nations of the civilized world may be divided into two broad categories: those which have not and those which have passed through their industrial revolution."* China, Egypt and some countries of Eastern Europe are among those which have not passed through their industrial revolution; England, France, Germany, U. S. A. and Japan are among those which have passed through their industrial revolution. This is, however, only a rough classification, for there is no sharp line of demarcation between the two categories, and most of the countries in the first category tend to pass into the second. India is in a stage of economic transition from the old order into the new, and while she yet belongs to the old economic type, signs are not wanting that the foundations of the new order are being slowly but surely laid down.

The Characteristics of the Old and the New Economic Orders. The characteristic feature of the old economic order is the preponderence of agriculture over all other occupations put together and the consequent preponderence of the rural over the urban population. The village is the economic unit which is more or less self-sufficient as the means of transport and communication are primitive. The division of labour in the village is naturally very simple and elementary as the market is very small; and custom and status predominate over competition and contract. Barter generally prevails and money

[•] Economic Transition in India by Sir T. Morrison, P. 1

economy is not very conspicuous. Industry is carried on by means of handicrafts and the artisan works indepenently by himself without the intervention of the middleman or the entrepreneur. Credit is undeveloped and usury prevails. characteristics of the new economic order on the other hand present a sharp contrast. The population is evenly distributed among a number of occupations and agriculture occupies relatively a much less important position. The urban population grows at the expense of the rural population. The means of transport and communication are highly developed and there is a close inter-dependence between the different parts of the country and the world. The division of labour is far more complex and production is carried on by means of machinery and power. Industry is organized on a large scale with its vast capital resources, expert organizers, large factories and manufacturing centres. Custom and status are displaced by unrestricted competition and freedom of contract. Barter is entirety displaced by money economy and banking and credit are highly developed. India is in a state of transition from the old order to the new and presents some of the characteristic features of both On the one hand the vast majority of our people live in rural areas and support themselves by agriculture -typical features of the old order; on the other hand we have the modern means of transport and communication like the railway, the steamship, the motor car and the motor bus, the airoplane, the telegraph, the telephone and the wireless and such absolutely modern industrial enterprises as the Tata Iron and Steel Works, the coal mines, the jute mills, the hydro electric works, the cotton mills, the leather works and several others. We seem to belong to all the centuries and are going forward in uneven stages. But as yet we belong predominently to the old order while the trend of development is towards the new order.

The Old Economic Order in India. The centre of gravity in the old economic order is the village as the bulk of the people live there and agriculture is the main occupation. In our study of the old economic order in India we must there-

fore concentrate on the village. Since times immemorial the Indian village had been a self-sufficient unit; and as the means of communication were very poor, there was hardly any trade between the village and the outside world and there was very little connection either. The majority of the villagers never went further than a few miles from the village, and a visitor to the village from the outside world was an event of rare occurrence. Except for the payment of the land revenue, the central authority left the villagers to their own devices; and the villagers enjoyed a very substantial measure of self-government. The determining factor about the connection between the village and the outside world is the means of communication; and until comparatively recently, the difficulties of transport were such that centralized administration was impossible and the village was necessarily an isolated little unit, which enjoyed a great measure of self-government, both under an autocratic tyrant and a benevolent ruler. And when in addition to the difficulties of transport, we bear in mind the tremendous force of custom in the life of the people, we can realize how the life of the village ran its even course almost entirely unaffected by what happened in the outside world. It is probable that the great events in Indian history, such as the invasions of Mohamed Ghaznavi and Mohamed Ghori, Nadir Shah and Ahmed Shah Abdali, to which the historian attaches the highest importance, were first heard of by our villager long after the invader had returned home or was lying in his grave. These invasions affected only a fringe of the people which came in direct contact with the invading army; the rest were almost entirely unaffected. And if the invader settled down and ruled the country, it made little difference to our villager whose land revenue was generally governed by custom; and for the rest he had little or no contact with the central authority. Sir Charles Metcalf. has given us an excellent description of the Indian village under the old order: "The village communities are little republics having nearly everything they want within themselves; and almost independent of foreign relations. They seem to last where nothing else lasts. This union of the village communities, each one forming a separate little state in itself is in a high degree conducive to their happiness, and to the enjoyment of a great portion of freedom and independence." It is the stability of the village which explains why the catastrophic political changes did comparatively very little damage to the country and enabled it to recuperate in a very short time. And it is the soundness of the village organization which is the root of the old economic order in India.

The Village Organization Under the Old World. The typical Indian village is an aggregate of cultivated holdings, in old times with some waste land invariably attached to it which provided both for fuel and pasture, and a central site for dwelling houses. The latter is a typical feature of the Indian village and instead of living on their farms, the villagers live together for the sake of security, for the sake of drinking water from the village well and for some other reasons. The inhabitants of the village may be divided into the agriculturists, the village officers and the artisans and the menials; and the agriculturists may be further sub-divided into landowners and tenants. The open field system, without any enclosures, is the prevailing method of cultivation and agriculture is generally financed by the village sowcar. After the payment of taxes and the interest on loans, if any, the bulk of the agricultural produce is consumed by the cultivator and the balance is taken over to the nearest market and exchanged for salt and other commodities which are not produced in the village. Each village has its own set of officers. The patel or headman is a man of great importance in ravatwari villages. He is a hereditary officer and his duties comprise the maintenance of peace and order, the collection of revenue and the exercise of petty magisterial jurisdiction. He holds a plot of land by way of remuneration for his services. Next there is the village accountant called the patwari or kulkarni who keeps the village records and accounts. And the rear is brought up by the watchman or choukidar and the village messenger. Besides these village officers, each village has a panchavat or a body of village elders whose duty it is to settle all disputes

and look after the general welfare of the village. Before the centralized British administration sapped its vitality, the panchayat was an efficient and living institution which held the village together and through which the villagers enjoyed a substantial measure of self-government. Besides the agriculturists and the officers each village had its own set of artisous and menials such as a carpenter, a blacksmith, a washerman, a goldsmith, a potter, a cobbler, a shopkeeper, an oilman, a barbar-surgeon and so on. The village also had its religious man and the money lender. The artisans were the servants of the village and their occupation was hereditary in character. They looked after the needs of all the villagers who only provided the necessary materials. They were rarely paid by the job and their labour was usually rewarded by an allowance of grain at the harvest time. Only an artisan like the weaver, whose services were occasionally required, was paid by the job. We have already discussed the self-sufficient and isolated character of the village which was due to lack of means of communication. In normal times this isolation did not adversely affect the village because of its self-sufficiency; but in times of scarcity and famine the difficulties of transport over even comparatively short distances exposed the village to the horrors of starvation. The village grain-stores, however, insured the people against scarcity provided it was of moderate duration. In a self-sufficient and isolated little community the need for money is rarely felt, and the comparative absence of money economy was, until recently, another outstanding feature of the village economy. Grain was generally both the medium of exchange and the standard of value. goes without saying that the village people were very conservative and custom and status rather than competition and contract governed their lives. Rent, wages and prices were all determined on the customary basis, except in very abnormal years of great scarcity.

Towns under the Old Order. The origin of most of the towns under the old order may be traced to the following reasons: they were places of pilgrimage like Benares, Allahabad,

Gaya, Nasik and Puri; they were imperial or provincial capitals like Agra. Delhi, Lucknow, Lahore, Poona, Golcanda and Bijapur; and they were commercial centres owing to their favourable position along trade routes like Mirzapur, Bangalore and Hubli. The percentage of the total population living in the towns cannot be accurately determined owing to lack of statistics, but it is roughly estimated at about 10 per cent. which compares favourably with the urban population in most of the European countries at that period. Contemporary writers, both Indian and foreign, have given us a vivid description of a large number of thickly populated towns which leads us to the conclusion that in the eighteenth century India had at least a dozen towns which were equal in size and population, and in some cases were distinctly larger, wealthier, and more thickly populated than the biggest towns in Europe. Trade and industry also were more highly developed than in any European country, and in this connection we must bear in mind the fact that the various European companies which came to trade with India came to buy manufactured goods and not raw materials, and the sale of foreign manufactured goods in India was comparatively negligible. In roughly estimating the number of people engaged in industry, we must remember that in addition to the urban population engaged in industrial pursuits there was a very considerable number of the rural population engaged likewise, and the total population supported by industry has been estimated at about 40 per cent. On the other hand the total population supported by trade, industry and transport, according to the last census report, was only 16 6 per cent. Life in the towns was naturally very different from life in the rural areas. Food was imported from the neighbouring villages. Barter was replaced by money economy. Trade and industry were much better organized and there was a greater variety of occupations. The extensive use of hundies or bills drawn by one banker on another shows that trade and credit were well organized and we know that money was by this means transferred from one account to another all over India. The foreign merchants were struck by the skill of the Indian bankers who surpassed their

highest standards: "The Jews are scarcely fit to be apprenticed to the money changers in India." The great commercial houses dealt not only in money but in goods as well and there were well-established firms which dealt on a large scale over extensive areas. And considering the difficulties of transport, it shows that the commercial skill of the people was of a high order.

Industries under the Old Economic Order. We have already discussed rural industry in India under the old economic order: and in addition to this rural industry, which supplied the needs of the villagers, there was a highly developed urban industry which produced various kinds of goods of exquisite workmanship for which India was famous from the earliest times. Egyptian mummies dating from 2000 B. C. have been found wrapped in Indian muslin of the finest quality which was known to the Greeks as the Gangetika, and Rome consumed very considerable quantities of Indian manufactures. While the cotton textiles constituted the staple industry of the country which found an extensive market over the greater part of the world, the silk manufactures, the woolen shawls, and the sandlewood boxes were equally well known. That the iron industry was as highly developed as the cotton and other industries is proved by the fact that all through the christian era, and even before. Indian steel was in demand in the Near Eastern and European countries, and that it "found once considetable demand for cutlery even in England."+ Some idea of the superiority of the Indian iron manufacturers' technique may be obtained from the fact that the production of such stupendous structures as the iron pillars of Delhi and Dhar and the iron beams supporting the roof of the temple at Kanarak in Southern India-which were set up more than 1200 years ago-would have been, until about the middle of the last century, an impossibility even in the largest foundry in Europe. A little more than a century ago Indian ship-

^{*} Moreland : India at the Death of Akbar, P.

[†] Ranade's Essays on Indian Fconomics, P. 160.

building was in such an advanced condition that it excited the jealousy of British shipping and political power had to be used to put down the Indian rival.* The present industrial backwardness of the country is responsible for the popular delusion that industrial backwardness has been a chronic feature of Indian history but nothing could be further from the truth. The Industrial Commission Report rightly begins as follows:

At a time when the west of Europe, the birthplace of the modern industrial system, was inhabited by uncivilized tribes, India was famous for the wealth of her rulers and for the high artistic skill of her craftsmen. And, even at a much later period, when merchant adventurers from the West made their first appearance in India, the industrial development of this country was, at any rate, not inferior to that of the more advanced European nations.*

We venture to add that a comparative study of the industries in Western Europe and India, about the time when the merchant adventurers from the west first came to India, gives ample justification for the statement that industry in India was distinctly more advanced than in Europe; and our present industrial backwardness need not make us apologetic or half hearted in assessing the previous industrial achievements of the country which constitute a brilliant record from the earliest times right down to the eighteenth century. In this connection we may repeat that the various European trading companies came to India primarily to buy Indian manufactures for which there was a very keen demand. The organization of the Indian industry was not unlike the European guild system founded on the basis of caste which pursued its hereditary occupation. There was a good deal of division of labour and a certain amount of localization of industry. For example the famous woollen shawls were produced in Kashmir, Amritsar and Ludhiana; silk textiles were manufactured at Murshidabad, Maldah and

^{*} Industrial Commission's Report, P. 251: Pandit Malaviya's Minute of Dissent.

^{*} The Industrial Commission Report, P. 6.

other Bengal towns; brass, copper and bell-metal products had their important centres in Benares, Nasik, Poona, Hyderabad, Vizagapatam and Tanjore; arms and shields were manufactured in Sialkot, Kotli, Lahore, in Sind and in Cutch; and the towns of Rajputana specialized in enamelled jewellery, stone carving and other kinds of artistic work. Agra specialized in marble inlaying work. In addition there were centres for gold and silver thread, sandalwood work, glass and ornamental rings, tanning and leather works, paper making and perfumery; while the spinning and weaving of cotton, which was the staple national industry, had its important centres for artistic work at Dacca, Lucknow, Ahmedabad, Nagpur and Madura.

The Decay of Indian Industry. A. The Influence of Foreign Rule. The fundamental reasons for the decay of industries of the old order in India are two: foreign rule and the invention of machinery and the competition of machine made goods. Unfortunately a good deal of political prejudice has vitiated the discussion of this issue and while the Indian has put excessive emphasis on the evil consequences of a foreign government and its deliberate efforts to crush Indian industry, the Britisher has unduly emphasised the importance of the industrial revolution and the inevitable superiority of machinery over handicrafts. As a matter of fact both these factors jointly contributed to the decay of Indian industry, and neither foreign rule alone could have crushed Indian industry without the help of the industrial revolution which supplied cheap goods, nor could the industrial revolution alone have so completely crushed Indian industry without the help of British rule which used its power to the full to discourage industrial production in India and to stimulate the consumption of British goods. The establishment of foreign rule meant the disappearance of the indigenous courts and the loss of their patronage was a heavy blow to the urban industry. The British officers who replaced the Indian courts had little use for the Indian handicrafts and the educated Indians who were associated in the work of administration loyally followed the fashions of their new masters and more or less had to do it. And the little European patronage that was forthcoming demanded cheap goods and ornamental knickknacks and souvenirs of a European pattern and had disastrous results on the industry in extensive adulteration, hasty workmanship and poor taste. It is a suggestive fact that the handicrafts were quite flourishing in many of the native states while they were dying out rapidly in the British territory.* The foreign rule did not support the authority of the guilds and other bodies which regulated the handicrafts and so led to a further decline. With the disarming of the population the various armament industries received a heavy blow. But above all the greatest harm done by foreign rule to the Indian industry was the deliberate policy of the East India Company and the British Parliament to discourage Indian manufactures in the carly years of British rule in order to encourage the rising manufactures of England. As. Mr. R. C. Dutt+ has pointed out. it was their fixed policy to make India subservient to the industries of Great Britain and to make the Indian people grow raw produce only, in order to supply material for the looms and manufactories of Great Britain; and this policy was pursued with unwavering resolution and fatal success. And it stands to reason that in pursuit of the prevailing mercantile policy, Britain was not likely to treat India, which had come into its possession, with greater consideration than she extended to her own colonists in America.

B. The Consequences of the Industrial Revolution in England on Indian Industry. While not underestimating the importance of foreign rule in the decline of Indian industry, it must be admitted that the industrial revolution in England, with its cheap machine made goods, played no less an important part. It is an interesting fact, to which perhaps sufficient attention has not been given, that the British conquest of India and the inudstrial revolution in England more or less coincided; and the great amount of capital, necessary for financing the

^{*} Industrial Evolution in India by D. R. Gadgil, P. 41.

[†] Economic History of India, Early British Rule by R. C. Dutt, P. 8.

industrial revolution, was provided by the ceaseless flow of the accumulated stores of specie from India to England after the battle of Plassey. This coincidence of British conquest of India and the industrial revolution in England was fatal to Indian industry. The mercantile policy which was vigorously pursued by the British Government was powerfully supplemented by the cheap, machine made British products which steadily wiped out the handicrafts. A tremendous revolution was brought about in the industrial position of the country: from a leading industrial nation India became an almost exclusively agrictultural country. There is hardly and parallel for such a revolution in the economic history of the world. The decay of industry and progressive ruralization have gone hand in hand so that while the number of people supported by industry are decreasing. those who eke out some kind of existence from agriculture are still increasing. Indian textiles, shipbuilding, iron, glass and paper industries-all registered a steady, continuous and uniform decline. The last straw on the back of the Indian industrial camel was provided by Lord Dalhousie and his scheme of extensive railway construction: British trade and industry were further stimulated and they expedited the ruin of the Indian artisan even in the village. Far from lending a helping hand to the artisan in his terrible distress the government pursued either a strict policy of laissaiz faire or went out of its way to help the British manufacturer. The imposing figures of foreign trade ere the result of the ruin of internal trade and industry. It is very likely that under any circumstances the handicrafts would not have survived against the formidable competition of gigantic machinery, complex division of labour, large scale production and modern means of transport. But while the struggle would have been difficult in any case, foreign rule in India made it impossible and under the circumstances the swift and almost complete collapse of the handicrafts was inevitable.

The Contrast between the result of the Industrial Revolution in England and India. The industrial revolution was responsible for the ruin of the artisan both

in England and India. In England too the transition from the domestic industry to the factory meant much dislocation and considerable suffering for the handicraftsman. But there was one fundamental difference. In England the new factories and the industrial progress created a great demand for labour and after a sharp but comparatively brief struggle the artisan migrated to the new towns and joined the increasing ranks of industrial labour for which there were many openings. In India the artisan whose market had been captured by machine made goods had no opening left open to him, as the goods were made by machines outside India and he was faced with blank despair. There were no modern factories in the country to absorb him and because he could not do anything else he turned to agriculture. But there was no room for him even there. More than half a century ago, the Famine Commission of 1880 reported that the numbers dependent for their livelihood on the land were far more than necessary for carrying on agricultural operation, and that the land could not support such an excessive number. But since then the problem has become far more acute and the progressive increase of the numbers dependent on agriculture for their livelihood (simply because they cannot find anything else to do) is our most difficult and fundamental economic problem. The percentage of the population supported by agriculture was 61% in 1891, 66% in 1901, 71% in 1911, and 72 8% in 1921. The figure for 1931 is vitiated by classifying women of agricultural families under domestic service and by a huge increase in miscellaneous occupations which leaves the whole position very obscure. But since the percentage of the population supported by industry has been slightly decreasing and there is no perceptible increase in any specific occupation, we are of opinion that the tendency for a larger percentage of the population to eke out some kind of livelihood from agriculture is still continuing. These increasing percentages are sufficiently alarming, but when in addition we bear in mind the huge increase in the population, the real position becomes much worse and seems to verge on a catastrophe. Behind the camouflage of increasing numbers engaged in getting

some kind of livelihood from agriculture, we have the plain fact that there is chronic unemployment on a vast and imprecedented scale in comparison to which the unemployment in Europe and America pales into insignificance. The English artisan who was displaced by the machine turned to a factory; the Indian artisan had to turn to agriculture, in which there was no room for him; in other words, his contribution to the production of wealth in the country was almost negligible. This is the fundamental difference between the results of the industrial revolution in England and in India on the position of the artisan. And it goes without saying that as a result of the industrial revolution there was a tremendous increase in the wealth and prosperity of England, while there was a corresponding increase in the poverty, unemployment and suffering in India.

The Village in Transition. The Causes. We have discussed the organization of the village under the old order and now we proceed to study the change from the old order to the present transitional stage. The causes of this change may be briefly summarized under the heads of transport, administrative centralization and the growth of individualism. Obviously the change in transport brought about by the construction of a network of railways and roads is by far the most important. It has destroyed the self-sufficient and isolated character of the village and has linked it up with the country at large and even the world. It has brought about a tremendous change from the village market to an international market and the extent of the change is only equalled by its rapidity. It has made possible the British policy of administrative centralization which has destroyed village autonomy. The district and taluka boards which are British creations have proved in practice to be poor, lifeless and ineffective substitutes for the village autonomy which functioned admirably. And the growth of individualism, which is a characteristic feature of western life and philosophy, has been another factor which has contributed its share to the disintegration of the village community. Individual rights have grown in every direction at the expense

of the corporate life in the village which had been already weakened as a result of centralized administration. Without the resusitation of village self-government, any comprehensive scheme of rural reconstruction is inconceivable; but the task is by no means an easy one. The tradition of village self-government has been broken for about a century and the village economy which has undergone a revolutionary change has to be reconstructed on a new and Harmonious basis.

The Village in Transition: I. The Effects on Agriculture, The most remarkable feature of the village in transition is the destruction of its isolated and self-sufficient character. The village now imports from outside a variety of articles such as cloth, kerosine oil, umbrellas, mirrors, bangles, drugs, scissors. tea, sugar, matches and so on. And naturally the village exports a part of its raw produce which it grows for the outside market. The nature of famine has been transformed. The modern famine, unlike the old famine, means a famine of money and purchasing power and a rise in prices and not a scarcity of foodstuffs. The old village grain store has practically disappeared. The linking up of the village with the outside world has further resulted in the displacement of barter by money economy. Besides the village population is no longer as stable and immobile as it used to be. The modern means of transport have made it easy for the villager to shift to the town and his present day economy makes it necessary for him to supplement his income by working in the town. But with all these revolutionary changes going on in the village, there has been no fundamental improvement in the organization of agriculture, and if anything, owing to increased fragmentation and subdivision, the organization has become more primitive. The pressure on land is infinitely greater than before as, besides the substantial increase in population, the artisan, who was driven out of industry by the competition of British machine made goods, has no other alternative except to fall back on agriculture. The commercialization of agriculture came into prominence in the cotton boom during the American Civil War and was inevitable when the village was linked up

with the world; and in the canal irrigated areas in the Punjab there is a tendency to substitute commercial for subsistence husbandry. There is also a specialization of particular crops in different parts of the country as for example jute in Bengal, wheat in the Punjab, cotton in Bombay and Behar and oil-seeds in the Central Provinces. The rise and growth of the class of landless labourers is another sign of the village in transition. Not very long ago a landless abourer was rare but according to the census report in 1921 there were 291 such labourers to every 1,000 cultivators and in 1931 their number had increased to 407. This is a revolutionary change and the dispossession of the old peasantry by the moncy lender is going on apace. It looks like the beginning of an agrarian revolution.

The Effects on Handicrafts. The change in the village crafts brought about by the transitional condition of the village has not been of a revolutionary character. The carpenter, the blacksmith, the washerman, the barber and the potter have still a well-recognized position in the village society but custom now plays a less important part than it did before. Payment by job rather than for the year is coming into practice and the village artisan is ready to migrate if an opportunity for improving his prospects is available. On account of cheap and easy transport the villager is now no longer entirely dependent on the local artisan who has been severely hit by the competition of cheap machine made goods. There is a tendency among certain artisans like the weaver and the goldsmith to concentrate in the larger villages or the towns. It is yet a transitional stage and all the artisans have not been equally affected. Handspinning has been the worst sufferer and the competition of aniline dyes has hit the village dyer pretty hard. The weaver has also suffered on account of the competition of machine made goods, both Indian and foreign, but hand weaving is by no means yet extinct in India and it has been estimated that there are still some millions of weavers in the country. The blacksmith and the carpenter have been rather adversely affected by the growing use of cheap machinemade tools. Again, the import of kerosine oil hits the village

oilman. Some of the artisans have partly adapted themselves to the new conditions; for example, the weaver uses mill-made yarn and in some cases the fly-shuttle; the tailor uses a sewing machine and the smith imports ready made iron and tin shects. But gradually some of the village artisans are being forced to join the ranks of agricultural labourers and rural industry registers a decline. Those of the artisans who stick to their hereditary occupation are generally in a desperate position and in times of scarcity and distress they are the first to flock to the public relief works. In the present day organization of life in the village, status and custom are being steadily displaced by contract and competition and this is equally true with regard to rent, wages, interest and profits. With its closer contact with the outside world it was hardly to be expected that the village could maintain its traditional organization

The Beginnings of Modern Industry. In the preceding pages we have endeavoured to indicate the flourishing condition of Indian industry upto the eighteenth century and its rapid decline owing to foreign rule and the competition of machine made goods. This decline gathered steady momentum during the greater part of the nineteenth century until the country was almost reduced to the condition of a purely agricultural country. About 1875 we had touched the industrial rock bottom and since then a change has occured very slowly indeed and almost imperceptibly. As Justice Ranade has pointed out, "Things were as bad as they could be about 1870-5; since then the tide has turned, and India has shown signs of revival which mark its first step in the transition from a purely agricultural country into a partly manufacturing and trading country."* The beginning of modern industry in India was made with the plantation industries such as tea, coffee and indigo which from the beginning have been in European hands and mark the starting point in the European exploitation of India's natural resources. removal of restrictions on European settlement in India by the

^{*} Ranade's Essays, p. 103.

Charter Act of 1833 stimulated the flow of British capital and enterprise into India and this movement became specially pronounced during the sixties. The example of the British entrepreneur had a stimulating effect on Indian business circles, more specially in Bombay where the foundation of modern industry under Indian control was laid. About the middle of the last century modern factories were built in the country, and the cotton industry in Bombay under Indian control and the jute industry in Calcutta under European control were the two outstanding examples. And the industrial revolution gradually spread to some other industries. We shall discuss the various industries in detail at a later stage. But it is necessary to point out here one extraordinary feature of the industrial revolution in India. While in other countries the industrial revolution started with the iron and coal industries, which supplied machinery and power, in India it started by nurchasing ready made machines from other countries and even coal in some cases had to be imported from outside. The industrial revolution in this country has started with its tailend in front and it is not surprising that its foundations are weak and unsound. The splendid enterprise of the late Jamshedji Tata has succeeded to some extent in repairing the mischief, but the undeveloped condition of our basic industries has undoubtedly been a serious obstacle in the way of the general development of industries. But apart from its slow and uneven progress, the bulk of our industry is controlled by foreign capital and enterprise, which have created powerful vested interests antagonistic to national progress from the political and economic point of view. Among other causes which retard our industrial progress may be mentioned the shyness and inadequacy of our capital resources, poor banking facilities, the uneven distribution of coal, the inefficiency of labour, the dearth of skilled labour and organizers of industry and above all the apathy and indifference of the government whose policy is dictated by British interests.

The Progress of Industry. The industrial progress of the country may be measured from the statistics of foreign trade

and the growth of towns. The examination of statistics of imports and exports of raw materials and manufactured goods should vield valuable results. It is necessary to point out that semi-manufactured goods like cotton yarn and tanned hides have been included under the head of manufactured goods: and further, it has been rightly pointed out, the official statistics for the imports of manufactures have been vitiated by the fact that machinery, metals and metal manufactures are excluded. This is a very serious defect which greatly detracts from the value of the statistical data. But after making due allowance for it, the conclusion is justified that the tendency towards some industrial development is unquestionable and is growing though very slowly indeed. During 1879-1892, as Justice Ranade has pointed out, the export of manufactured goods increased by 211%, while the export of raw materials increased by only 43%; the import of manufactured goods increased by 39%, while the import of raw materials increased by 91%. Professor V. J. Kale has continued the analysis further from 1892 to 1907 and he has shown that during this period the export of manufactured goods increased by 139% while the export of raw materials increased by 57%; the import of manufactured goods increased by 93% and the import of raw materials increased by 127%. And the same tendency continues. It must be borne in mind that while the percentages are very impressive, the total quantity of our manufactures is comparatively very small, and all we can conclude is that while we have not attained to any substantial industrial progress, the marked tendency towards the collapse of our industries has been reversed. After studying the statistics of foreign trade we must turn our attention to the figures of our urban population which is another indicator of our progress in modern industry. Here our progress has been very slow indeed. The percentage of our urban population was 9.5 in 1911, 102 in 1921 and 11 in 1931. When we bear in mind that the urban population in England is about 80% and in France, which is not predominently an industrial country, it is about 50%, and even in India the percentage of the population engaged in industry

before the British conquest is estimated at about 40%, we get a rough idea of our industrial bcakwardness and the vast distance we have to traverse before we can step in line with the progressive countries of the world. The solution of this problem is the fundamental issue in Indian economy; and we must realize that in order to increase our industrial population even to the level which existed in India in the early eighteenth century, about 30% more of our population i.e., about a hundred million more of our people, must be supported by industry. It is a gigantic problem which staggers the imagination and leaves no room for any complacency about the progressive industrialization of the country. And there can be little doubt that we cannot solve this problem without a comprehensive planned economy. The progress made by individual initiative and private enterprise has been just sufficient to throw into a sharp relief both the gigantic nature of the problem and their hopelessly inadequate equipment for solving it.

Towns in India. The total number of towns in India is 2,575 out of which only 39 have a population of 100,000 and over, and 674 have a population of less than 5000. There are various influences which make for the growth and decline of our towns. Among the former may be reckoned the railways and navigation which have brought into existence new commercial centres like Calcutta, Bombay, Karachi, Madras and Rangoon which owe their origin to British enterprise. Large scale industrial production is responsible for the growth of towns like Jamshedpur, Ahmedabad, Cawnpore, Sholapur and others. During famines the countryside is depleted and the people rush to the towns and a part of the emigrants are permanently absorbed. The creation and growth of the class of landless labourers have a tendency to encourage migration to the towns. The fact that the villages now obtain their supplies of goods from towns is also responsible for the growth of the latter. The attractiveness of town life and the unattractiveness of village life, administrative centralization and facilities for secondary and higher education, are among other reasons which make for the increase of our urban population.

On the other hand the decline of handicrafts has hit hard the famous old centres like Dacca, Murshidabad, Tanjore and others. Even the places of pilgrimage show some decline as the number of pilgrims and their demand for local products are falling. Changes in regional values and the diversion of trade routes have affected adversely towns like Patna and Mirzapur. The periodic epidemics, whose greatest intensity is felt in the urban areas, often result in the desertion of towns until the abatement of the scourge. On the whole the urban population is increasing but the pace is extremely slow, and without the organized industrialization of the country on a large scale it is bound to remain so.

CHAPTER V.

AGRICULTURE: GENERAL SURVEY OF PRINCIPAL CROPS AND EXPORTS.

The Place of Agriculture in Indian Economy. Agriculture occupies in Indian economy a place of overwhelming importance which is without any parallel in advanced European countries. Roughly speaking three out of every four persons in India get their livelihood from agriculture as against 11.6 per cent in England, 26.3 per cent in U. S. A., 28.6 per cent in Germany, and 40.7 per cent in France, which is about the highest figure for a progressive country. Sir Guy Fleetwood Wilson, a former Finance Member of the Government of India, was only stating a hald fact when he described the framing of the Indian budget as a "gamble in the rains", because the rains in India generally determine the prosperity or otherwise of agriculture, which in its turn occupies the central place in our economy. But unfortunately agriculture in this country is as important as it is backward; and every one must endorse Dr. Clouston, Agricultural Adviser to the Government of India, when he remarked that in India we have not only our depressed classes but our depressed industries, and agriculture undoubtedly is one of them. By whatever standard we may judge it-by the outturn per acre or the system of rotation of crops, by animal husbandry or other subsidiary rural occupations, by the quality of seeds or the implements and fertilizers in use, by the size of holdings or irrigation facilities and other land improvements, by the marketing organization or the provision of credit -our agriculture is in a hopelessly backward condition. Its improvement is almost equally necessary in the interests of our industries, as without increasing the purchasing power of the rural masses the industrial products cannot find an adequate market. The mechanization of agriculture must

¹ Cf. Indian Economics-Jathar and Beri, Vol. I, 157.

bring into existence large manufacturing establishments to produce agricultural tools and machinery and to absorb some of our surplus agricultural labour. The point is that the problems of agriculture and industry are connected together very intimately and cannot be solved separately. In England the industrial and the agrarian revolutions proceeded side by side and in our own times the same thing has happened in Russia. Therefore, apart from any other considerations, industrialization is necessary in the interests of agriculture itself and will provide a satisfactory home market for our raw materials. There is no antagonism whatsoever between agriculture and industry which, on the contrary, supplement each other,

Agricultural Statistics of British India.* The following figures relate to British India only for the year 1931-32.

[†] Arca and vield of Principal Crops in India (including India: Status) for 1932-33

Сторя	Area in Acres	\ 1eld
Rice	82,518,000	31,002,000 ton5
Wheat	32,973,000	9,447,000 ,,
Sugarcane	3,305,000	1,670,000 ,,
Tea	807,700	433,669,300 lhs
Cotton	24,515 000	1,512,000 bales of 400 lbs
Jute	2,143,000	7,072 000 ,, ,,
Lanseed	3,250,000	405,000 tons
Rape and Mustard	6,079,000	1,052,000 ,,
Sesamum	6,025,000	547,000 ,,
Castor Seed	1,602,000	149,000 11
Groundnut	7,00.5,000	2,934,000 ,,
Indigo	59,800	11,100 cwts
Coffee (1931-2)	173,200	33,734,500 1hs
Rubber	180,100	6,381,400 ,,

Estimates of Area and Yield of Principal Crops in India (1932-33) p 8.

^{*} Statistical Abstract for British India 1934, p. 464-5

Type of area.		Million acres	
Net area by professional survey		668.86	
Area under forest	•••	88.56	
Not available for cultivation	•••	145.61	
Curable waste other than fallow		154.99	
Fallow land		49.04	
Net area sown with crops		228.83	
Area irrigated		48.72	

The following table gives the area under different foodgrains.

Food Grain	ns.		Area in	Million	Actes.
Rice				81.28	
Wheat	•••	***		25.32	
Barley	***	•••		6.49	
Jowar				21.60	
Bajra		•••	•••	13.94	
Ragi			•••	3.87	
Maize	•••			6.10	
Gram			•••	15.93	
Other (Grains and 1	Pulses		30.44	

The total area under food grains is slightly over 205 million acres, and the area under other food-crops (including fruits, vegetables, spices etc.) is 8.38 million acres. The area under sugar is a little over 3 million acres while that under tea is 775,121 acres and under coffee 91,715 acres. The following table gives the area under oilseeds.

Oilseeds.	A	rea in M	fillion Acres.
Linseed	•••	•••	2.21
Sesamum (til or jinjil	i)		3.71
Rape and Mustard	•••		3.50
Groundnut	•••	•••	4.22
Cocoanut	•••	•••	.61
Castor		•••	.51
Other Oilseeds			8а. т

Estimated Vield.

The total area under oilseeds is 15.88 million acres. The following table gives the area under fibres and other important crops.

Type of Crop.			Area in	Million A	cres.
Cotton	•••	•••		14.48	
Jute	***	•••		1.84	
Other Fibres	•••			.68	
Indigo				.05	
Op ium				.04	
Tobacco	•••			1.15	
Fodder Crops				9.62	

The following table gives the estimated yield of principal crops in India but is subject to the qualification that it includes the crops in certain Indian States.

Principal Crops.

Timelpar Crops.			rammated Field.		
Rice (cleaned)	•••	33	(Million Tons)		
Wheat	•••	9.02	Do		
Cotton		4.67	(400 lbs. bales)		
Jute	•••	5.54	Do		
Linseed	•••	.41	(Million Tons)		
Rape and Mustard		1.02	$\mathbf{D_0}$		
Sesamum (till or	jinjili)	-47	$\mathbf{D_o}$		
Groundnut (nuts	s in shell)	2.27	$\mathbf{D_o}$		
Castor seed		.14	\mathbf{Do}		
Raw Sugar (Gur)	3-97	$\mathbf{D_0}$		
Indigo		9,900	cwts.		
Tea		394.08	(Million 1bs.)		
Coffe	•••	33.73	$\mathbf{D_0}$		
Rubber	***	20.11	\mathbf{Do}		

An Analysis of the Statistics. Out of the total area in British India 13.24 per cent is under forests and 21.78 per cent is not available for cultivation, making a total of 35.02 per cent. The cultivated area amounts to 34.21 per cent; the current fallow amounts to 7.33 per cent; and the balance of a little over 23 per cent is cultivable waste other than fallow. The last item,

which determines the scope for extensive cultivation in British India, is very unevenly distributed among the different Indian provinces, and there is apparently greater room for extending cultivation in Burma, Assam, Sind, the Punjab and U. P. than in the remaining provinces. But a closer examination reveals that the prospects of extensive cultivation are, on the whole, very limited. For the greater part only inferior lands remain to be taken under cultivation and in the majority of cases this can be only done if adequate irrigational facilities are available, and irrigation has its own problems, technical and financial. In Burma there is a strong provincial feeling growing up and with the separation of Burma it is likely to be further strengthened. Without the help of labour drawn from outside, there cannot be any considerable extension of cultivation in Burma, and the Burmese object to outside labour. Thus the prospects of any considerable extension of cultivation in Burma are not promising. In Assam again the unhealthy climate and the uninviting conditions for the recruitment of labour militate against any considerable extension of cultivation. conclude that no spectacular increase in the area under cultivation in the country can be reasonably expected and this is confirmed by our previous records. The solution of Indian agricultural problems lies in intensive cultivation. As an indication of the scope in this direction it may be mentioned that Sir M. Visyesvaraya has estimated that while in Japan it takes one third of a cultivated acre to support an individual, in India it takes five sixths of an acre to do so, not taking into consideration the fact that the Indian is semi-starved. On this basis the margin for improvement by means of intensive cultivation works out at 150 per cent.

The Principal Crops: The Major Food Crops. Our agricultural production is of a varied character and enables the country to be self-sufficient in its food supply and almost all raw materials. Food-crops have an overwhelming preponderence and account for over 80 per cent. of the area under cultivation. Rice is the leading crop of India as it is the staple food of the majority of the people. As we have already stated,

it occupied 81.28 million acres in 1931-32, forming 35.5 per cent of the net area sown with crops. The estimated yield was 33 million tons. India is one of the greatest producers and exporters of rice in the world, though the bulk of the production is consumed within the country, leaving only about 7 per cent for export. Burma has practically the monopoly of export trade in rice as her production is far greater than her local consumption. With the separation of Burma the position of India as a great rice exporting country will change radically. In 1931-32 India exported 2.37 million tons of rice valued at Rs. 18.14 ctores. The quantity is fairly normal while the value registers a sharp decline owing to a substantial fall in agricultural prices. A great many varieties of the crop are cultivated in different parts of the country depending upon local conditions. The contribution of the Agricultural Departments to the improvement of the rice crop has been negligible. Next in importance to rice comes wheat which accounts for 11 per cent. of the net area sown with crops. In 1931-32 the area under wheat accounted for 25 32 million acres and the estimated yield was a little over o million tons. The exports amounted to a little over 20 thousand tons valued at a little over Rs. 15 lakhs. There are very considerable fluctuations in the exports of wheat according to the nature of seasons both in India and abroad. Owing to the catastrophic fall in the agricultural prices the year 1931-32 was very abnormal. In normal years in the past about 10 per cent of the wheat was exported from India, but in abnormal years the price in India is high, the export trade dwindles into insignificance, and at times considerable quantities of Australian wheat are imported into the country. The general tendency towards a decrease of wheat exports is so pronounced that the Agricultural Commission anticipate its total ressation within a few generations; and it is not unlikely that India may become a wheat importing country. During 1930-21 the imports of wheat into India amounted to 232,000 tons valued at Rs. 215 lakhs. In order to help the wheat growers in the country the Government have reduced the railway freights on wheat and passed the Wheat Import Duty Act which levies a high import

duty of Rs. 40/- per ton on foreign wheat. The improved irrigation and transport have considerably stimulated the cultivation of wheat, particularly in the canal colonies of the Punjab; and the Agricultural Department has also helped wheat cultivation by the introduction of improved varieties. But a great deal of the ground remains to be traversed if Indian wheat is to compete on equal terms in the markets of the world.

The Minor Food Crops. Barley was cultivated in 6.49 million acres chiefly in the United Provinces and Bihar. The exports in 1931-32 amounted to 26,806 tons valued at Rs. 16.27 lakhs. The fluctuations in the exports have been very consider-The internal demand is very great as barley is used as able. food both for man and cattle. Jowar and bajra account for 21.60 and 13.94 million acres respectively of area under cultivation. The export in 1931-32 amounted to 58,503 tons valued at Rs. 42.40 lakhs, and these figures constitute the highest record both in quantity and value. Jowar and bajra are valuable food crops for the masses in Madras, Deccan and Hyderabad and they also supply valuable fodder for the agricultural cattle. Pulses are extensively grown throughout the country and constitute a very important item in the dietary of the people. Gram is easily the leading pulse and in 1931-32 the area under it amounted to 15.93 million acres. On account of the large internal consumption the exports are comparatively small and in 1931-32 amounted to nearly 91,000 tons valued at Rs. 88.93 lakhs. The next item of sugarcane is obviously very important. In 1931-32 the area under sugar was 3.04 million acres and recently under the stimulus of protection to the sugar industry this area has been steadily increasing. About half the area under sugar cultivation is in the United Provinces. The estimated yield of gur (raw sugar) was 3.97 million tons in 1931-32. Since 1922 India has been spending anything from Rs. 15 to Rs. 20 crores on foreign sugar and the quantity of imported sugar was, until very recently, in the neighbourhood of one million tons. In 1931-32 India imported 556,274 tons of sugar valued at Rs. 6.16 crores and the figures of subsequent years are even more satisfactory. We shall discuss the problems of sugar industry in the chapters

on industry, and here we shall contine ourselves to the agricultural aspect of the question. It is stated by the Indian Sugar Committee that India's outturn of actual sugar per acre is less than one-third that of Cuba, one-sixth of Java and one-sevently of Hawaii. Sugar cane has been subjected to a systematic study by the Agricultural Department with a view to improving its quality and introducing improved varieties; and recently a canebreeding station has been started at Coimbatore in Madras. The bulk of the people in the country consume not sugar but gur, and hence attention must be given to the indigenous industry of making gur which is in a primitive condition. The miscellaneous food crops include fruits, vegetables and spices and in 1931-32 accounted for an area of 8.38 million acres. India grows a rich variety of fruits but owing to the great poverty of the masses the demand is comparatively small and the prices are There is obviously scope for the development of fruit cultivation, specially in view of the fact that foreign fruit is imported in considerable quantities not only at the ports but in un-country places. There is a large variety of vegetables grown in the country and a considerable extension of area under fruits and vegetables is possible, more particularly in the neighbourhood of urban areas. The development of transport, careful picking and packing and cold storage facilities are some of the obvious reforms in this connection. Spices are chiefly grown in the extreme south of India though certain varieties are grown everywhere. Pepper, chillies, ginger, cardamon, betel-nut. cinnamon, and cloves are the principal Indian spices 1931-32 the spices exported amounted to 321,210 cwts. valued at Rs. 87.25 lakhs which was by far the lowest value recorded for many years.

Non-Food Crops: Tea and Coffee. With the single possible exception of China, India is the largest tea producer in the world. The industry owed its initiative to the Government which finally established in 1852 that Indian tea could compete with Chinese tea. In view of its rapid expansion in 1865 the Government ceased its connection with the industry which has since been financed and managed almost exclusively by British

capitalist concerns. The industry has enjoyed a long spell of prosperity with growing internal consumption and foreign exports. In 1931-32 the area under tea was 775,121 acres and the estimated yield was 394.08 million lbs. It has been justly observed that the organization of the tea industry is of a high order and every garden of any importance has its own factories, where tea is prepared for the market, as it is essential that the various processes should be carried through immediately after the leaf has been plucked. The better organized factories are elaborately equipped with highly specialized plant and are under the supervision of expert tea makers. There is a very large export trade in tea and in 1931-32 it amounted to 341.51 million lbs. valued at Rs. 10.43 crores, the quantity being a little below the normal. Tea is thus an important staple export. The Indian Tea Association, to which the proceeds of a small cess levied at the request of the industry are handed over, stimulates the sale of Indian tea both inside the country and in foreign markets

Coffee. The systematic cultivation of coffee begins from 1830. It is cultivated in the south, chiefly in Mysore, Coorg and the Nilgiris. It reached its high water mark in 1862 after which a decline set in due to the appearance of the destructive beetle and the import of cheaper Brazilian coffee in the European markets. In some of the coffee growing areas, coffee has been replaced by tea. In 1931-32 the area under coffee was 91,74 acres and the estimated yield was 33.73 million lbs. The exports amounted to 155,000 cwts. valued at Rs. 94.50 lakhs. Both the quantity and the value have declined considerably.

Fibres: Cotton and Jute. Next only to food is the importance of clothing which in India generally means cotton clothing. The area under cotton in British India was 14.48 million acres in 1931-32, the highest record being 18.18 million acres in 1925-26. To this must be added about 10 million acres under cotton in the Indian States. The estimated yield in British India in 1931-32 was 4.67 million bales of 400 lbs. each, the highest record being nearly 7 million bales in 1929-30. There is

a large export trade in raw cotton and in 1931-32 it amounted to 424,400 tons valued at Rs. 23.51 crores which is the lowest record. There has been a tremendous fall both in the quantity and value of the cotton owing to the severe depression. recent years the highest quantity exported was 747,000 tons in 1925-26 valued at Rs. 95.25 crores. Before the depression the normal exports were between 6 and 7 hundred thousand tons valued at over Rs. 60 crores. The principal cotton provinces in India are Bombay, Central Provinces and Berar, Hyderabad. Punjab, Madras and Central India States. India stands next only to the United States in the area under cotton and its total outurn. Most of the Indian cotton produced is short staple and comparatively coarse and is not suitable for the manufacture of cloth of higher counts. The chief consumers of Indian cotton are Japan and the continent in Europe, though recently the British demand has registered an increase; but Japan is far and away India's best customer. The yield of cotton per acre in India is very low, being only between 75 and 100 lbs. of lint cotton, as compared to 180 lbs. in U. S. A. and 300 to 400 lbs. in Egypt. The Agricultural Departments have been endeavouring to improve the quality and the yield of cotton and the Egyptian and American cottons have been successfully introduced in Sind. With the completion of the Llyod Barrage irrigation project the area under such cotton cultivation is expected to increase substantially. The Cambodia cotton has been successfully introduced into Madras and there has been a great improvement during recent years in the production of medium staple cotton. Recent tests have shown that certain varieties of Indian cotton can be used for spinning yarns of higher count. The Indian Central Cotton Committee was formed in 1921 and the East India Cotton Trade Association was formed in 1922, in accordance with the recommendations of Indian Cotton Committee which was appointed by Government of India to examine the possibilities of increasing the supply of long staple cotton in India, to suggest improvements in the existing methods of ginning and marketing, and to make recommendations in regard to the prevention of adulteration, damping and

mixing. The Cotton Transport Act was passed in 1923 to prevent the adulteration of cotton, and having been successful in Bombay it has been extended to Madras. The Cotton Ginning and Pressing Factories Act, which was a corollary to the Transport Act, was enacted in 1925. The Indian Central Cotton Committee has established a technological laboratory at Bombay to carry out spinning tests and is responsible for certain research schemes in various provinces. Its finances are provided by a small cess of two annas per bale on all cotton used in mills in British India and exported from the country. Bombay has also passed a Cotton Markets Act. The Government of India has shown a considerable interest in the exports of cotton as witnessed in the Indo-Japanese Trade Agreement, by which Japan has entered into an agreement to buy a certain amount of Indian cotton, and the Indo-British Trade Agreement, by which Britain has expressed its intention of buying more Indian cotton. But it is very significant that the Government of India has not devised any effective measures for the manufacture of the Indian cotton into cloth within the country in order to make India self-sufficient in respect of cotton cloth. This aspect of the question has been entirely ignored and the explanation seems to be that the vested interests of Lancashire debar the Covernment from pursuing this policy.

Jute. Next only to cotton, jute is the most important fibre in the country. India enjoys a monopoly as the world's sole produce, of jute. Its cultivation is restricted to Bengal, Assam and Orissa where the soil is enriched by alluvial deposits brought by river inundation and is thus suited to grow this exhausting crop without any expenditure on manure. In 1931-32 the area under jute cultivation amounted to 1.84 million acres while the average area under cultivation during the previous five years was 3.32 million acres. The exports of raw jute in 1931-32 were 586,000 tons valued at Rs. 11.18 crores which is the lowest record for a long time. During the previous five years the average has been 784,000 tons valued at Rs. 26 crores. The slump in jute prices and the depression in the jute manufacturing industry are clearly visible in the figures cited

above. An effort is being made to raise prices by restricting the area under cultivation of jute, as over production has been an aggravating factor in the general depression. Germany is now the largest customer for India's raw jute and next comes the United Kingdom. Other importing centres are the continental countries in Europe, U. S. A., Japan and China.

India grows a great variety of oilseeds such as linseed, sesamum, rape and mustard, groundnut, coconut, castor, cotton seed, mowra, niger, coriander, cummin, ajwan and kardi. Although oilseeds are subject to great fluctuations in price and the crops themselves are more or less precarious by nature, they cover an immense area. The total area in British India under oilseeds was 15.88 million acres in 1931-32 which is a little below the normal. The total exports of oilseeds in 1932-33 were 733,000 tons valued at Rs. 11.31 crores, and registered a decline of 26 per cent in quantity and 22 per cent in value as compared to the previous year, and a decline of 38 per cent in quantity and 50 per cent in value as compared to the normal trade before the depression set in. The proportion of exports of oilseeds to total production varies considerably with the different seeds; and while linseed is grown largely for export, the percentages of exports in rape, mustard and sesamum was always small and recently has become a tiny fraction. The figures for groundnuts have been fluctuating very sharply and we can only say that groundnut to-day is the leading type among the exports in the oilseeds group. India does not make the best use of her oilseed resources though some attempts have been made to develop the oil-crushing industry. Recently many new sources for the supply of oilseeds have been developed, apart from the progress in the refining processes which has considerably increased the interchangeability of oils. Indian oilseeds have now to face the competition of Argentine linseed, Chinese sesamum and West African groundnuts; and many vegetable products grown in these countries are being exploited to produce oils. In the case of groundnuts there has been a striking expansion in the country on account of the successful introduction of disease-resisting exotic varieties from Senegal and Mozambique; and the Department of Agriculture has succeeded in increasing the yield of groundnut even on light soils on which it has been found to grow well.

The history of indigo cultivation is long, the industry having been in existence from the earliest times of which we have any record and in 1778 the East India Company organized it on modern lines and encouraged British planters to take it up. By 1837 India had recovered the foremost place among the indigo-producing countries of the world from which she had been temporarily ousted by the West Indies. India's position remained unassailed until in 1897 German laboratories produced indigo on a commercial scale. Indian exports were seriously affected. The area under cultivation in India fell from 1.68 million acres in 1896-7 to .05 million acres in 1931-32, when the exports were only 799 cwts. valued at Rs. 2.01 lakhs. During the war on account of the markets of the world being closed to the German synthetic products the indigo industry in India received a temporary stimulus which disappeared with the stoppage of the war. The future prospects of indigo are very doubtful indeed. Bihar is the most important indigo centre from the point of view of foreign trade and in Bihar the dye is systematically extracted and marked under efficient supervision.

Opium. On account of the agreement with China to stop all exports of opium to that country, and the adoption of the policy of controlled internal consumption, the area under opium has been steadily declining and in 1931-32 it was only 42,000 acres. The cultivation of the poppy is carried on under a system of government licenses and is now practically confined to the United Provinces. In 1931-32 the exports amounted to 2,715 cwts. valued at Rs. 86.93 lakhs.

Tobacco. It is believed that the tobacco was introduced into India by the Portuguese early in the seventeenth century. In 1931-32 the total area under tobacco was 1.15 million acres which was distributed over Madras, Bengal, Bihar and Orissa, Bombay, Burma, United Provinces and the Punjab. The bulk of the tobacco grown in the country is consumed locally. In 1931-32 the exports amounted to 26.26 million lbs. valued at

Rs. 85.42 lakhs and these figures are well below the normal. Madras and Rangoon are the chief exporting centres in India. The Agricultural Research Institute has been directing its attention to the problem of improving the quality of Indian tohaccoes. The value of imports of manufactured tobacco has always been considerably greater than the value of exports.

Fodder Crops. The area under fodder crops was 9.62 million acres in 1931-32 and though it has been steadily increasing this area is insufficient for feeding the vast number of cattle in the country. The Agricultural Department has paid some attention to the important problems of growing and storing fodders. The successful introduction of the Egyptian clover and soil renovator in Sind, Bihar, the Central Provinces and the North West Frontier Province is to the credit of the Agricultural Department.

Rubber. Rubber is grown chiefly in Burma and to a small extent in South India. Most of the rubber grown is exported. In 1931-32 the exports amounted to 15.10 million lbs. valued at Rs. 44.58 lakhs. These figures are very abnormal as the average for the previous five years is 24.64 million lbs. valued at Rs. 205.13 lakhs. India's share in the world's production of rubber is only about 3 per cent, and with the separation of Burma it will be less than 1 per cent. Rubber is put to-day to a variety of uses and our imports of rubber manufactures in 1031-32 were valued at Rs. 220.98 lakhs, which is well below the average.

The Low Yield of Agriculture. Agriculture in India is far and away the most important national industry but its condition is anything but satisfactory. The average yield per acre of the different crops in India compares very unfavourably with the yield in agriculturally advanced countries, where agriculture is no longer a craft, but an organized industry which utilises the resources of modern science. Mechanization has revolutionized the entire problem of agriculture and, consequently. India finds herself threatened in her principal vocation, namely, agriculture. Our country has ceased to be important in the international market as an exporter of cereals.

In fact it has resorted to tariff protection to keep out foreign wheat and rice. In other words, the costs of production of our miserably paid agriculture are higher than those of foreign countries which utilise scientific knowledge and modern methods to a far greater extent than ourselves. Sir M. Visvesvarava has estimated that while the average production per acre in India is valued at Rs. 25, in Japan it is valued at Rs. 150. And making a comparative study of some particular crops we find that in the case of wheat the production per acre is about 780 lbs. in India, 1350 lbs. in Japan and 2340 lbs. in Denmark which has the best record of any country. Again, in the case of rice, the production per acre in India is estimated at 871 lbs. while in Japan it is 2477 lbs. In cotton we find that while the figure for India is 98 lbs. per acre, it is 141 lbs. for U. S. A. and 300 lbs. for Egypt. For barely the figures are 19.8 bushels (of 48 lbs.) for India, 31.7 bushels for Japan and 45.6 bushels for Denmark. We have said enough to show that the agricultural yield in this country compares very unfavourably with other progressive countries; and the comparison tends to be still more adverse. In the international market India is being steadily ousted even from the production of raw materials which was her last resort. Incidentally it may be observed that the entire basis of our foreign trade is likely to be transformed. We shall discuss in detail later on the causes of the low productivity of Indian agriculture which is established beyond any doubt.

Exports of Agricultural Produce.¹ In our survey of the principal crops we have given the figures of the quantity and value of the major items of exports; and in this section we propose to discuss the general question of the desirability or otherwise of the exports of agricultural produce. As a preliminary, it must be pointed out that there are signs which indicate that our export trade is changing its character very considerably. Rice occupies the most important place among the food grains exported from India. As we have already seen the bulk of the rice exports come from Burma, and with the separation of Burma this major item in the exports of India will more

¹ Cf. Indian Economics-Jathar and Beri, Vol. I, pp. 185 et seq.

or less disappear, and India is likely to become a rice importing country. Again, as we have already seen the exports of wheat are very precarious and it is not improbable that India may cease to be a wheat exporting country. In oilseeds and in cotton, foreign competition is steadily increasing and there has been a considerable decline both in the quantity and value of our exports which have been substantially accentuated by the severe trade depression. "The decline in the demand for our exports is due to causes of a more or less permanent nature and there is little or no hope of an increase in exports to the level of even four or five years ago."* But the crucial issue to be discussed is to determine to what extent the export of our raw produce is desirable in the best interests of the country. The advocates of the exports argue that the exports represent a true surplus for which there is no effective demand within the country; and by exchanging this surplus for manufactured goods which India does not produce. the best interests of the country are served. The opponents of exports argue that there is no true surplus, because the exports of food grains represent, not what the country cannot consume, but what the mass of people need urgently but have not the wherewithall to purchase; and as for non-food crops, they consider it criminal to look on complarently while valuable raw materials, which are badly wanted for the development of indigenous industries, are being exported abroad and imported back into the country in the shape of manufactured goods. The popular remedy of imposing restrictions on exports, while it is useful in times of abnormal scarcity and high prices, cannot really solve this problem. The restriction on the export of foodgrains is likely to result in the decrease of the cultivation of food-grains and an increase in the cultivation of non-food crops. And a restriction on the export of non-food crops, in the absence of industries which could consume our raw materials. The essence of the solution of this would be unthinkable. problem is to increase the purchasing power of the mass of

^{*} Prof. Brij Narain in India Analysed Vol. II, p. 18.

people; and this can only be done by an effectively planned economy which will bring about a simultaneous revolution in agricultural and industrial production. Mere restrictions on the exports of our agricultural produce would only lower their price which will hit very hard the mass of people in the country who are engaged in the production of raw materials. country has suffered very greatly owing to the catastrophic fall in the price of raw materials and our problem is how to raise prices of raw produce and not how to lower them. In this connection we must not lose sight of the fact that the exports represent only a small fraction of the total production in the country, and the restrictions on exports in normal times, quite apart from their desirability, would not affect the prices considerably. And lower prices would undoubtedly have an adverse effect on agricultural improvements. We may repeat that the real solution of the problem is to increase the purchasing power of the masses by developing production in the country; and any other remedy is likely to prove ineffective and at best can only tinker with the problem.

Deterioration of Soil. Is the soil in India progressively deteriorating? This is obviously a very crucial question for Indian agriculture. There is a certain amount of apparent deterioration due to the fact that on account of the increased pressure of the population the cultivator is forced to till inferior soils, and further, density of population may lead to a diminution in the number of periodical fallows. But the real point at issue is whether the soil is deteriorating on account of the removal, year by year in the from of produce, of essential substances which are not returned to the soil either by nature or by the practice of the cultivator. Dr. Voelcker held that on account of the export of seeds, cotton and other products, the soil constituents that are removed are not returned to the soil, which consequently is suffering continuous exhaustion. The Agricultural Commission quotes the evidence of Dr. Clouston, Agricultural Adviser to the Covernment of India, who is of opinion that, "most of the area under cultivation in India has been under cultivation for hundreds of years, and had reached its state of

maximum impoverishment many years ago."* The Agricultural Commission expressed its own opinion that, "a balance has been established, and no further deterioration is likely to take place under existing conditions of cultivation."† The plain meaning of a balance being established is that the soil has become so impoverished that it cannot easily become worse, and there is little consolation in it for the Indian agriculturist. The poor condition of the soil is undoubtedly a factor of major importance in the low yield per acre in India; and the Agricultural Commission strongly recommended that more attention should be paid to soil surveys and research as a preliminary step towards the introduction of improvements

^{*} Report, p. 76.

[†] Ibid , p. 76.

CHAPTER VI.

AGRICULTURE: THE PROBLEMS OF LAND.

Subdivision and Fragmentation of Holdings. Among the principal causes of the backwardness of agriculture in India, the subdivision and fragmentation of holdings occupies a very important place. Before proceeding further it would be useful to define the terms with some precision. By subdivision is meant the distribution of the land ultimately into small plots and generally among the numerous descendents of the original owner. Fragmentation refers to the manner in which the land held by an individual is scattered throughout the village area in plots separated by land in the possession of others. Subdivision is chiefly due to the laws of inheritance customary amongst Hindus and Muhammadans which enjoin a succession to immovable property amongst all the heirs usually in equal shares. Fragmentation is, in the main, due not to the laws of inheritance but to the method by which the law as to the division of property amongst the heirs is carried into effect. It is a truism to say that without solving the problem of subdivision and fragmentation modern improvements in agriculture cannot possibly be introduced in this country. We shall discuss later on in detail the extent of subdivision and fragmentation, its causes and its effects on our agricultural production and the possible remedies. Here it is sufficient to observe that the problem in India exists in a very acute form and renders all substantial progress in agriculture impossible. Dr. Harold Mann sums up the combined effect of subdivision and fragmentation as follows: "This destroys enterprise, results in an enormous wastage of labour, leads to a very large loss of land owing to boundaries, makes it impossible to cultivate holdings as intensively as would otherwise be possible, and prevents the possibility of introducing outsiders, with more money, as tenant

farmers or as purchasers of good agricultural property."* The problem has been by no means peculiar to India and practically every country has had to tackle it sooner or later. "In parts of Spain it is not uncommon to own and farm 16 or 17 acres divided into 80 to 120 plots scattered over a radius of three miles and there are many isolated parcels of 35, 25 or even 12 square yards."† While Spain as a backward European country has yet to solve this problem, other countries have tackled it by a variety of legislative and administrative measures which have an important object lesson for our country. We shall briefly review these measures in considering the remedies for subdivision and fragmentation of holdings.

The Extent of Subdivision and Fragmentation. ing to the Census of 1931‡ "for each agriculturist there is 2.9 acres of cropped land" while the corresponding figure for 1921 is 2.7 acres. In the chapter on population it has been shown that the number of people engaged in agriculture has been unduly diminished in 1931 as a large number of agriculturists have been returned under "domestic service" and the unspecified category. We therefore prefer the figures of 1921. That the average holding in India is 2.7 acres shows the extent to which subdivision has been carried. The Punjab figures, which are the only ones available for a province, indicate that 22.5 per cent of the agriculturists cultivate one acre or less; a further 15.4 per cent cultivate between one and two-aud-a-half acres; 17.0 per cent between two-and-a-half and five acres and 20.5 per cent. between five and ten acres. Except for Bombay, which would probably show a very similar result, and Burma, which would give higher averages, all other provinces have much smaller average areas per cultivator. The subdivision amongst cultivators is a reflection of conditions existing amougst permaneut right-holders, but it is aggravated by the lack of alternative

^{*} Harold Mann: Land and Labour in a Deccan Village, p. 154.

[†] Irvine: The Making of Rural Europe quoted by Radhakamal Mukherii: The Land Problems of India, p. 56.

[‡] Report, p. 288.

means of livelihood which drives multitudes to grow food for a very meagre subsistence. The average size of the holding in the village of Pimpla Soudagar in the Poona district, according to Dr. Mann, appears to have been as much as 40 acres in 1771, 171/2 acres in 1818, and 7 acres in 1915; and considering the increase of population during the last twenty years, it is only reasonable to suppose that it has been further reduced. It is evident that during the last century the character of land holdings has altogether changed; and while in the pre-British times and under the early British rule the holdings were of a fair size of about ten acres, individual holdings of less than two acres were hardly known. Fragmentation, as we have already pointed out, is due to the customary method by which the law as to division of property amongst the heirs is carried into effect; and in extreme cases the result is ludicrous. In Ratnagiri, for instance, the size of individual plots is sometimes as small as 1/60th of an acre or 301/2 square yards; in the Punjab fields have been found over a mile long and but a few yards wide; while areas have been brought to notice where fragmentation has been carried so far as effectively to prevent all attempts at cultivation.* In Bombay Presidency proper there are three to four plots per holding. Fragmentation of cultivation is a far worse evil than fragmentation of the land of permanent right-holders. It is also much more expensive and has been carried to greater extremes. In Pimple Soudagar Dr. Mann found that 62 per cent of the cultivators' plots were below one acre, because the small rightholder attempts to secure any addition he can to his scanty holding, wherever it may be situated. Where the soil is of uniform quality or where the differences in quality are not great, fragmentation is an evil of the first magnitude. In a village in the Punjab, an owner was found with his land in two hundred different places whilst, in the same village, there were five owners with over one hundred plots each. †

The Causes of Subdivision and Fragmentation. As we have already pointed out, subdivision is chiefly due to the laws

^{*} Agricultural Commission Report, p. 134.

[†] Ibld., p. 134.

of inheritance customary amongst Hindus and Mohammadans which enjoin a succession to immovable property amongst all the heirs usually in equal shares; and fragmentation is, in the main, due not to the laws of inheritance but to the method by which the law as to the division of property amongst the heirs is carried into effect. But while the laws of inheritance and succession have been in existence for many centuries, the evils of subdivision and fragmentation are comparatively quite modern. The growth of the spirit of individualism, which is the result of western influences, is responsible for the break-up of the joint family system; and it has naturally resulted in great subdivision and fragmentation of holdings. The bias of English judges in favour of private property and individual rights has had the same result. And subdivision is normally accompanied by fragmentation because the heirs feel terribly jealous of each other and insist on getting a share of every kind of land. Increase of population, which means an increase in the number of heirs to agricultural property, has been a further accentuating cause. The decline of handicrafts increased the pressure of population on agriculture and contributed its share to subdivision and fragmentation; and the effect of industrial backwardness has been similar. The surplus population could not be shifted from the soil; the overcrowding in agriculture became worse, and ultimately increased the tendency to subdivision and fragmentation.

The Evil Consequences of Subdivision and Fragmentation. The evil consequences of subdivision and fragmentation are many and varied. The Indian cultivator's equipment is notoriously antiquated and inadequate, but even this he cannot ntilise to the full though the cost of keeping draught animals and of maintaining the agriculturist himself is hardly influenced by the extent to which their capacities are put to use. The area of land wasted in innumerable boundaries, hedges and paths, which excessive subdivision and fragmentation must necessarily involve, is very considerable. Again, on account of the small size of the unit of cultivation, it may not be worth while to sink a well, though otherwise the circumstances may

be favourable. The employment of modern labour-saving devices such as tractors for example is rendered practically impossible. Fragmentation has all the disadvantages of both the small holdings and the large holdings: it prevents the use of machinery and labour-saving devices which can only be utilized in large holdings; and, on the other hand, it hinders the adoption of intensive cultivation by hand labour which is the great advantage of the small holdings. As the Royal Commission on Agriculture observes,* "Fragmentation of holdings is in many parts of India one of the most important of the factors tending to prevent agricultural improvement. There seems to be common agreement that its evil effects are so great that the administration should not rest until a remedy has been found." Difficulties in connection with fencing and protection from stray cattle or thieves are obvious. Besides. fragmentation, as compared to a compact area, involves a greater expenditure of capital and labour and a lesser return. It makes it impossible for the cultivator to stay on his holding in the interests of efficient farming. By multiplying boundaries and disputes about right of way, it is an endless source of litigation and has a disruptive influence in the life of the village community. Irrigation becomes difficult although sufficient water may be available. The combined result of subdivision and fragmentation is at times to drive the land entirely out of cultivation. But great as are the evils of subdivision and fragmentation, it cannot be denied that in some cases they serve a useful purpose. The scattering of the fragments of land over a wide area may tend to counteract the disparities in production due to seasonal factors. And in some parts of the country agricultural conditions make it essential for the cultivator to possess some strips of land in a different soil. The breaking up of large estates, which subdivision involves, is also a move in the right direction. But after making due allowance for these facts, and taking a broad survey of the problem as a whole, the conclusion is irresistable that the excessive subdivision and fragmentation of holdings is one of the major problems of Indian agriculture.

^{*} Report. p. 142.

The Remedies for Subdivision and Fragmentation adopted in other Countries. We have already observed that India is not the only country where the problem of the sub-division and fragmentation of holdings exists, so that before discussing the various remedies it would be useful to consider the line of action adopted in other countries. The general custom in Europe is to leave the property to a single heir, who gradually pays off the charge laid on it by the father for the benefit of the other heirs. In Germany, for example, the law encourages the practice among peasants of succession to undivided properties by the creation of a preferred heir, directing that the others shall be compensated according to the agricultural profitableness of the estate and not its selling value. In Denmark, the reconstituted state small holdings can be sold, but they cannot be subdivided, and the existing law puts insuperable difficulties in the way of adding one holding to another so as to make a large farm. According to a new law which is now being proposed, "No peasant farm, as existing at the moment of the passing of the law, may be extinguished or diminished in area without the sanction of the Ministry of Agriculture, and the period for which a farm or part of a farm may be leased without the sanction of the Ministry of Agriculture, is reduced from 50 to 10 years. A small holding may not be extinguished or diminished in area below the minimum fixed for its grade. except with the sanction of the Ministry and in the public interest. The land is graded by official valuers and official inspectors watch over the observance of the law. Fines up to 2,000 kr. may be imposed for its breach." The problem of fragmentation is tackled by legislation which compels the cultivators to accept restripment and consolidation of holdings when certain percentage of the cultivators desire it. In Austria the scheme is forced on the rest if 60 per cent of the cultivators gree to it; in Switzerland this is done if approved by 66 er cent of the cultivators representing more than half the

^{*} Strickland. Studies in European Co-operation, Vol. II, Chap. V moted by Radhakamal Mukherjee: Land Problems of India, p. 59.

land; while in Prussia and Japan a majority coerces the res Experience everywhere has shown that voluntary agreemen among the peasant proprietors are not equal to the task a securing consolidated holdings and legislation is unavoidable necessary. Such legislation, as we have seen, has been on the lines of compulsory consolidation of holdings when a certain percentage of the cultivators desire it, subsequent indivisibility of reconstituted holdings, and the prevention of the reconstituted holding from being combined with other holdings.

Remedial Measures in India. The Royal Commission of Agriculture observes in its report,* "In the evidence given before us, no practical suggestion was put forward for th prevention of further subdivision without interfering with th laws of inheritance." It is generally accepted that no practica suggestion is really possible until more occupations alternative to the cultivation of land become available. Thus the problem of agriculture in India ultimately depends for its solution or industrial development; and until industries provide an alter native occupation to our superfluous agriculturists, the evile of subdivision of land cannot be eradicated. Without at alternative occupation to which the non-inheriting children of the agriculturist could resort, any successful interference with the laws of inheritance is not practical proposition. Interference with the ordinary laws of inheritance has not been tried. except in new colonies where special conditions can be attached to new grants, or in the case of large owners rich enough to provide for the younger sons. Subdivision is retarded wherever restrictions on the alienation of land are imposed. In the Punjab canal colonies, subdivision has been checked by restrictions on alienation, and, in the case of certain grants, by the limitation of succession to a single heir. But it has not served to prevent subdivision of cultivation; and the single heir, when the clder brother, is not in a position to refuse a livelihood to his younger brothers, even though he cannot give legal rights in the land. It has been suggested that Muhammadans might find relief in the Egyptian custom whereby.

^{*} P. 138.

although the land is nominally divided among the heirs, it is actually left in the hands of one to cultivate on behalf of the whole number or may be handed to trustees to manage for all. Joint farming of the inheritance without partition has been advocated for Hindus. The Belgian custom whereby one heir, usually the eldest son, buys out the rest through the agency of mortgage bonds would, if adopted, check both subdivision and fragmentation. But none of these proposals is likely to meet with success until, as stated above, occupations alternative to the cultivation of land become available; that is, until industrial development in the country registers a substantial progress. The real solution of the problem of subdivision of land lies in finding a suitable occupation for those descendents of the agriculturists who have to leave agriculture.

We shall now proceed to discuss the remedies for fragmentation of holdings. The only measure that promises relief from the evils of fragmentation is the process which is generally known as the consolidation of holdings, though it is in reality the substitution, by exchange of land, of a compact block for a number of scattered fragments. Some striking results have been achieved on these lines in the Punjab through the agency of the Co-operative Department. By the end of July 1930 about 263,000 acres had been consolidated. The conditions in the Punjab are particularly favourable to the consolidation of holdings as its villages do not exhibit marked differences in the character of population and the quality of the soil. Again, consolidation is easier owing to the recent colonization of the canal-irrigated areas as well as on account of the simplicity of the land tenure system prevailing there. Even so, the consolidation of only about 263,000 acres out of a total cultiviable area of 30 million acres works out at less than one per cent. Moreover, it is only the problem of fragmentation which has been tackled in the Punjab, and nothing has been done there to prevent subdivision. Moreover, there is no guarantee that in the future the work of consolidation will not be undone. Obviously in order to check excessive fragmentation it will be necessary to resort to legislation; and the Punjab officials

land, while in Prussia and Japan a majority coerces the rest. Experience everywhere has shown that voluntary agreements among the peasant proprietors are not equal to the task of securing consolidated holdings and legislation is unavoidably necessary. Such legislation, as we have seen, has been on the lines of compulsory consolidation of holdings when a certain percentage of the cultivators desire it, subsequent indivisibility of reconstituted holdings, and the prevention of the reconstituted holding from being combined with other holdings.

Remedial Measures in India. The Royal Commission on Agriculture observes in its report.* "In the evidence given before us, no practical suggestion was put forward for the prevention of further subdivision without interfering with the laws of inheritance." It is generally accepted that no practical suggestion is really possible until more occupations alternative to the cultivation of land become available. Thus the problem of agriculture in India ultimately depends for its solution on industrial development; and until industries provide an alternative occupation to our superfluous agriculturists, the evils of subdivision of land cannot be eradicated. Without an alternative occupation to which the non-inheriting children of the agriculturist could resort, any successful interference with the laws of inheritance is not practical proposition. Interference with the ordinary laws of inheritance has not been tried. except in new colonies where special conditions can be attached to new grants, or in the case of large owners rich enough to provide for the younger sons. Subdivision is retarded where yer restrictions on the alienation of land are imposed. In the Punjab canal colonies, subdivision has been checked by restrictions on alienation, and, in the case of certain grants. by the limitation of succession to a single heir. But it has not served to prevent subdivision of cultivation; and the single heir, when the elder brother, is not in a position to refuse a livelihood to his younger brothers, even though he cannot give legal rights in the land. It has been suggested that Muhammadans might find relief in the Egyptian custom whereby,

[•] P. 138.

although the land is nominally divided among the heirs, it is actually left in the hands of one to cultivate on behalf of the whole number or may be handed to trustees to manage for all. Joint farming of the inheritance without partition has been advocated for Hindus. The Belgian custom whereby one heir, usually the eldest son, buys out the rest through the agency of mortgage bonds would, if adopted, check both subdivision and fragmentation. But none of these proposals is likely to meet with success until, as stated above, occupations alternative to the cultivation of land become available; that is, until industrial development in the country registers a substantial progress. The real solution of the problem of subdivision of land lies in finding a suitable occupation for those descendents of the agriculturists who have to leave agriculture.

We shall now proceed to discuss the remedies for fragmentation of holdings. The only measure that promises relief from the evils of fragmentation is the process which is generally known as the consolidation of holdings, though it is in reality the substitution, by exchange of land, of a compact block for a number of scattered fragments. Some striking results have been achieved on these lines in the Punjab through the agency of the Co-operative Department. By the end of July 1930 about 263,000 acres had been consolidated. The conditions in the Punjab are particularly favourable to the consolidation of holdings as its villages do not exhibit marked differences in the character of population and the quality of the soil. Again, consolidation is easier owing to the recent colonization of the canal-irrigated areas as well as on account of the simplicity of the land tenure system prevailing there Even so, the consolidation of only about 263,000 acres out of a total cultiviable area of 30 million acres works out at less than one per cent. Morçover, it is only the problem of fragmentation which has been tackled in the Punjab, and nothing has been done there to prevent subdivision. Moreover, there is no guarantee that in the future the work of consolidation will not be undone. Obviously in order to check excessive fragmentation it will be necessary to resort to legislation; and the Punjab officials

responsible for the achievement of co-operative consolidation of holdings, such as Messrs, Calvert, Strickland and Darling, themselves testified to that effect before the Royal Commission on Agriculture. As has happened in Baroda, permissive legislation is not likely to serve any useful puropse. Voluntary action, which has not yielded any encouraging results even in Europe, cannot be relied upon in India, so that nothing short of compulsory legislation would solve the problem. The Central Provinces Consolidation of Holdings Act was passed in 1928 and has been applied for the time being to the Chhattisgarh division only. The outstanding feature of the Act is that it gives power to a proportion, not less than one-half, of the permanent right-holders, holding not less than two-thirds of the occupied area in village, to agree to the preparation of a scheme of consolidation which, when confirmed, becomes binding on all the permanent right holders in the village and their successors in interest. The scheme prepared by the consolidation officer may be confirmed by the settlement officer or deputy commissioner, if all objections are removed, or by the Settlement Commissioner in other cases. No appeal lies but the local Government has power to revise. Civil courts are barred from jurisdiction. The Royal Commission on Agriculture* express their opinion that in view of conditions in Chhattisgarh, which they had opportunities of appreciating personally, this legislation should prove of value. The Bombay Small Holdings Bill of 1927 could not get through the local council on account of strong opposition to it both inside the council and outside. The crux of the criticism was that there were not available any reasonable opportunities for the absorption of the dispossessed holders in profitable employment. We have already discussed the point that without rapid industrialization which would provide an alternative occupation, it is not possible to solve the problems of subdivision and fragmentation.

The Place and Problems of Irrigation. The chief characteristics of Indian rainfall are its unequal distribution

Report, p. 140.

over the country, its irregular distribution throughout the seasons, and its liability to failure or serious deficiency. This failure or deficiency can be only made good by irrigation, which plays so large a part in agriculture in India that no study of it would be complete, which failed to examine its present position and future possibilities. In general the problems of irrigation fall into three main classes. In the first class, the problem is how best to utilize the water of rivers without recourse to the construction of storage works. The problem is in general solved by conducting the water drawn off from the rivers along contour levels, sufficiently high above the general levels of the fields to be irrigated, to permit the water to flow on to them by gravity. The irrigation canals of the Punjab supply notable examples of this type. In the second class, the problem is the management of the deltas of the rivers in such a way as to combine the protection of cultivation from wandering rivers with the regular supply of water necessary to the full development of cultivation in these fertile areas. The chief examples of the successful solution of this problem are to be found in the management of the deltas of the Godavari, the Kistna, and the Cauvery in the Madras Presidency. In the third class, the problem is the storage of surplus water by means of dams across the line of flow and their gradual release as required for the purposes of cultivation. The Sukkur Barrage in Sind is a notable work of this type. It will be, in the main, only from works of this class that any large extension of irrigation may be anticipated. The reasons for the construction of irrigation works vary greatly. In some cases, for example in Sind and over large areas of Punjab, where the rainfall is normally insufficient to ripen the crop, no cultivation is possible until schemes of irrigation carry the essential water to the land. In other cases, as in parts of the Deccan, the rainfall, though normally sufficient to ripen the crop, is yet so precarious that without irrigation there can be no assurance to the cultivator that his crops will mature. Yet again there are cases where irrigation is needed more as a precaution against famine than as a requirement of the normal year. The canals in the United Provinces, Bihar and Orissa and the Central Provinces provide examples of this type. The last general examination of the position in regard to irrigation in India was carried out by the Indian Irrigation Commission which was appointed in 1901. The report of the commission which appeared in 1903 was so comprehensive and its recommendations so exhaustive that no further enquiry of a similar character has been considered necessary. The development of irrigation which has since taken place has been, in the main, on the lines laid down by the Commission.

Productive and Unproductive Works. Previously all Government irrigation works were divided into three classes: productive, protective, and minor; but during the triennium 1921-24 this was changed, and now all works, for which capital accounts are kept, have been reclassified under two heads: productive and unproductive, with a third class embracing areas irrigated by non-capital works. The test of a productive work is that it shall, within ten years of the completion of construction, produce sufficient revenue to cover its working expenses and the interest charges on its capital cost. Most of largest irrigation schemes in India belong to the productive class. Unproductive works are constructed primarily with a view to the protection of precarious tracts and to guard against the necessity for periodical expenditure on the relief of the population in times of faming. They are financed from the current revenues, generally from the annual grant for famine relief and insurance, and are not directly remunerative. The construction of each such work is separately justified by a comparison of the value of each acre protected with the cost of such protection. Nearly one-eighth of the whole area irrigated in India from Government works is effected by minor works for which no capital account is kept.

Extent, Revenue and Produce. The area irrigated by Government irrigation works was 31 million acres in 1930-31 out of which the Punjab had the largest share of 11.49 million acres, Madras had 7.6 million acres, the United Provinces had 4 million acres and Sind had 3.7 million acres. The total capital

invested in the works was Rs. 136.44 crores in 1930-31. The gross revenue for the year was 12.00 crores, the working expenses Rs. 5.69 crores, and the net return on capital worked out at 4.7 per cent. In this connection it must be remembered that apart from unproductive works on which the return is negligible, the capital invested includes considerable expenditure amounting to Rs. 40.96 crores upon four projects of the first magnitude, namely, the Lloyd (Sukkur) Barrage Project, the Cauvery Metur Project, the Sarda Canal Project and the Sutlej Valley Project, which were then under construction and contributed little or nothing in the way of revenue. Of the several provinces, the return on the capital invested in productive works was highest in the Punjab, where the canals yielded 12.64 per cent., and it was the lowest in the Deccan where the yield was about 1 to 2 per cent. The total length of main and branch line canals and distributories in operation amounted to 75,000 miles; and the estimated value of crops raised on areas receiving state irrigation amounted to Rs. 86.19 crores in 1030-31.

The Irrigation Policy of Government. Irrigation works have existed in India since times immemorial. Apart from wells and tanks, there are some notable instances of large irrigation works carried out in ancient days in India. The oldest and most famous of these is the Grand Anicut across the Cauvery in Madras which dates back some 1600 years and, even before the improvements effected in the nineteenth century, irrigated over 600,000 acres. In the north, the Western Jamna Canal is attributed to Firoz Shah in the fourteenth century, and the Eastern Jamna Canal was started by Shah Jehan in the seventeenth century. The original Upper Bati Doah Canal and some of the inundation canals taking off from the Indus are also of ancient date. These examples suggested the construction of the large perennial irrigation works under the British administration. In the early British period, however, irrigation works were neglected as the new government did not take any interest in them. The result was that some of the old irrigation works were ruined. By the middle of the last century there was a change in the policy of the Government who began to repair and revive the old works. The unsuccessful experiment of entrusting the work to private British guaranteed companies affected irrigation adversely. But subsequently Government revised its policy and undertook the construction and maintenance of irrigation works themselves, raising the necessary loans for the purpose. Under this policy the great irrigation works in the Punjab and some other provinces, which have had such beneficent results, have been constructed. It is generally admitted that until comparatively very recently the Government in this country did not take much interest in irrigation. The first year in which figures for irrigation were recorded in the "Agricultural Statistics of India" in a fairly complete form was as late as 1908-09.

New Irrigation Works. The major works of exceptional importance are the Sukkur Barrage and Canals in Sind, the Cauvery (Mettur) project in Madras, and the Sutlej Valley Canals in the Punjab. The Sukkur Barrage, which was opened in 1932, is the greatest work of its kind in the world, measuring 4,725 feet between the faces of the regulators on either side. The total cost of the scheme is estimated at Rs. 20 crores. The anticipated area of irrigation is 51/3 million acres, of which 2 million acres represent existing innundation irrigation which will be given an assured supply of water by the new canals. The anticipated net revenue represents a return of 10 per cent. on the capital, but with the severe fall in agricultural prices these calculations require drastic revision. On the other hand a large increase in general revenues may safely be anticipated from the area of 3 million acres of waste which will be brought under cultivation. The increase in the production from land is estimated at Rs. 2,500 lakhs per annum. The total area to be irrigated by the Sutlei Valley works is a little over 5 million acres of which about 2 million acres are perennial and about 3 million acres non-perennial irrigation. While, 1,942,000 acres are in British territory, 2.825,000 acres are in Bahawalpur and 341,000 acres are in Bikaner. The total cost of the scheme was estimated at Rs. 1,460 lakhs. Upon this a return of 121/4 per

cent. is anticipated from water-rates alone; and if we include the sale proceeds of the desert land which is now irrigated, the anual return will be about 38 per cent. It bids fair to rival the Lower Chenab Canal, the return from which was more than 50 per cent, in 1020-30. These anticipations must be modified, however, in view of the fact that a revised estimate for the project amounts to Rs. 2,376 lakhs and agricultural prices have fallen substantially. The Cauvery Reservoir project, which will cost about Rs. 7 crores and will extend irrigation to a new area of 301,000 acres, is making satisfactory progress. The Sarda-Oudh Canals in the United Provinces were inaugurated in 1928 and the project will irrigate more than a million acres. The Damodhar River (Canal) project, which will irrigate 180,000 acres of rice lands in the Burdwan and Hooghly districts of Bengal, was commenced in 1926-27. A comprehensive irrigation programme extending over a period of 14 years is under investigation in the Central Provinces The possibility of increasing irrigation in the North-West Frontier Province is also receiving attention.

Irrigation versus Railways. At present the rival claims of irrigation and railways are not subject to dispute; but the controversy was hot and fierce in the beginning of the canal era some forty years ago. As the late Mr. R. C. Dutt pointed out, up to 1902 the Government had spent only about Rs 38 crores on irrigation as compared with Rs. 370 crores on railways. This was in spite of the fact that the railways had till about the beginning of the century been run at a loss, and frequent famines showed the urgent need for the extension of irrigation. Mr. Dutt was thus forced to the conclusion that heavy expenditure on railways was undertaken under the pressure of British interests who stood to profit by the opening up of Indian markets and the employment of British capital, and thus irrigation came to be neglected. The controversy has died out because the railways ceased to be a losing concern and the government has adopted a more liberal policy towards irrigation. As a matter of fact, while it may be a matter of dispute to determine the exact importance of railways and irrigation in Indian economy, they are by no means antagonistic to each other and actually supplement each other. While irrigation increases the production of foodstuffs and raw materials, railway are necessary to transport them wherever they are needed. But it must be added that the irrigation policy of the government needs to be further liberalized, and while protective irrigation may not be remunerative to the state in terms of financial return, it is amply remunerative in terms of the welfare of the people, which should be the acid test in determining the irrigation policy.

Some Evil Consequences of Canal Irrigation. While irrigation generally has had very beneficent results, waterlogging and salt effervescence are dangers particularly associated with canal irrigation. These dangers have not always been effectively guarded against, with the result that soils have sometimes deteriorated as a result of irrigation. It is estimated that in the Punjab 125,000 acres were thrown out of cultivation in 1926-27 by the rise of subsoil water; and a much larger area has been affected by the appearance of salts driven to the surface of the soil, and there is a danger of the cvil spreading further. It is generally acknowledged that the considerable wastage of water by the cultivator in the canal-irrigated areas is one of the causes of water-logging and salt effervescence. The uncertainty of water supply is an important factor in this connection, and the cultivator alone is not to blame. The Agricultural Commission recommends that further investigations and experiments should be undertaken before a final decision about the sale of water by volume is arrived at. Further, the lack of drainage in the canal irrigated areas has converted originally healthy tracts into malarious ones, over and above its adverse effects on agriculture. The Agricultural Commission has made a sound recommendation that a careful drainage survey should form in future an integral part of all new irrigation projects and that drainage maps should be prepared.

Wells. So far we have dealt only with the great irrigation schemes, but well-irrigation is, and will always remain, a vital factor in Indian irrigation. The most recent figures give thirty per cent. of the irrigated area in India as being under wells. Moreover the well is an extremely efficient instrument

of irrigation. When the cultivator has to raise every drop of water he uses from a varying depth, he is more careful in the use of it; well water imposes at least three times as much duty as canal water. Again, owing to the cost of lifting, it is generally used for high grade crops. It is estimated that wellirrigated lands produce at least one-third more than canalwater lands. Although the huge areas brought under cultivation by a single canal scheme tend to reduce the disparity between the two systems, it must be remembered that the spread of canals increases the posibilities of well irrigation by adding, through seepage, to the store of subsoil water and raising its level. It is estimated that there are about 25 lakhs of wells in various parts of the country and they represent a capital outlay of about a hundred crores of rupees. Wells are mostly private works and Government have systematically encouraged well irrigation by advancing loans for the purpose and exempting well watered lands from extra assessment due to improvement. Bullock power is generally used for lifting the water out of the wells and recently attempts have been made, particularly in Madras, to substitute mechanical power, furnished by oil engines, for the bullock. This has been found economical where the water supply is sufficiently large. There is plenty of scope in all the provinces for the extension of well irrigation. While the Agricultural Commission was opposed to the United Provinces plan of subsidizing the construction of tube-wells, they recommend government assistance in the shape of technical advice, takkavi loans, and the lending of boring equipment and skilled labour on payment of a moderate fee.

Tanks. Next to the well, the indigenous instrument of irrigation is the tank. The village or the roadside tank is one of the most conspicuous features in the Indian scene. The tanks vary a great deal in size and range from great works, holding up billions of cubic feet of water, and spreading their waters through great chains of canal, to the little village tank irrigating a few acres. Tank irrigation is practically unknown in the Punjab and in Sind, but it is found in some form or other in all other provinces, including Burma, and finds its

highest development in Madras. Some of these works in Madras are of great size, holding from three to four billion cubic feet, with water spreads of nine miles; and even for petty irrigation works of this variety, Madras holds the record with over 35,000 works which serve between two and a half to three million acres. In the ryotwari tracts of Bombay and Madras, all but the smallest tanks are controlled by Government. In the zomindari tracts only the large tanks are state works. The area irrigated from tanks is about 8 million acres, but in many cases the supply of water is extremely precarious. The tanks are a poor refuge in famine as the rainfall does not suffice to fill them and they remain dry throughout the season. Many old village tanks, due to long neglect, have been silted up and are out of repair. A more vigorous policy which would put them in working order would be obviously helpful.

Permanent Improvements on Land. One of the outstanding features of Indian farming is the almost entire absence of permanent improvements on land, and generally speaking the landscape owes little or nothing to the hand of man. The fields mostly lie unwatered, unfenced and unembanked, without shelter for man or beast. Without proper fencing, a scientific rotation of crops is not possible, and wild animals and stray cattle do a lot of damage. It also involves numerous boundary disputes and a good deal of labour in connection with herding cattle and safeguarding crops against thieves. In the absence of wind-breaks, a certain amount of damage is caused by the freely blowing winds. The absence of field embankments is responsible for a good deal of soil erosion which causes the agriculturist very considerable damage in some parts of the country. Again, the soil is rarely graded and levelled properly to secure uniform absorption of water. The absence of a satisfactory system of drainage is responsible for a good deal of water logging, particularly in the canal area; and in some provinces railway embankments have interfered with the natural drainage of the countryside. If an outlet for excessive water is provided, it is allowed to run over other people's land and damage it; and thousands of acres of valuable land have

been thus hopelessly ruined. A proper control of surface drainage is necessary for the benefit of the agriculturist. is obvious, however, that it is far beyond the means of the individual cultivator to make provision for embankments. fencing and drainage, and the problem requires resort to either joint schemes of land improvement for its solution, or to state action. Some of the provincial governments have recently appointed special embankment officers, and we are of opinion that without state action the problems will not be solved. Another serious defect is the absence of farm buildings. The result is that a good deal of time and labour is wasted for both men and cattle in going to and fro from the field to the village home; and as the farmer lives away from his fields, the supervision is more difficult. Cattle are housed with the men in the village which is highly unsatisfactory. It must obviously entail a considerable loss of manure. But the solution of the problem by means of housing the agriculturist on his fields is by no means easy. The cultivator requires the protection and security of the village; he is attached to his ancestral village home; the expense of putting up a new house on the farm is generally beyond his means; on account of fragmentation of holdings the agriculturist has not one but several tiny farms; and lastly the village well provides the cultivator with drinking water which he cannot get on his scattered holdings. But a solution must be found for these various difficulties in the interests of better farming.

CHAPTER VII.

AGRICULTURE: THE STATE AND LAND TENURES.

I. THE STATE IN RELATION TO AGRICULTURE

Historical Survey. Until comparatively very rencently the state in India had very little to do with agriculture with the exception of realizing the land revenue. The agricultural departments in the various provinces were started as late as 1884 as a result of the recommendations of the Famine Commission of 1880, and representations of the Lancashire cotton industry, which was interested both in the cultivation of long staple cotton in the country, and the prosperity of the Indian agriculturist who consumed its products. To begin with the agricultural departments in the country confined their activity to a certain amount of statistical work in connection with agriculture; and they were further handicapped by meagre grants and additional work in the shape of keeping land records and supervision of land registration. The agricultural departments had a nominal existence, but for all the benefit which the agriculturist derived from them, they might as well have not existed. The old laissaiz faire policy of the government was persisting under a different garb. It was in 1905 that, thanks to Lord Curzon, the agricultural departments were reorganized, some provision was made for agricultural research and instruction, and the departments relieved of the extra work with which they had been saddled. A central research institute was organised at Pusa, and to it Lord Curzon devoted the greater part of a generous donation of £30,000 given by Mr. Henry Phipps of Chicago. Agricultural colleges were started at Poona, Cawnpore, Nagpur, Lyallpur, Coimbatore and Mandalay, and provincial research institutes were set up with an experimental farm in each important agricultural tract. With the advent of the Montford

reforms, agriculture became a provincial transferred subject. but the Government of India retained responsibility for central research institutions which comprise the Agricultural Research Institute at Pusa (which has been transferred to Delhi). the Imperial Institute of Veterinary Research at Muktesar, the Imperial Institutes of Animal Husbandry and Dairying at Bangalore and Wellington, the Imperial Cattle Breeding Farm at Karnal, the Creamery at Anand, the Imperial Sugarcanebreeding station at Coimbatore, and the Sugar Bureau at Cawnpore which has recently been transferred from Pusa. accordance with the recommendations of the Royal Commission on Agriculture, the Imperial Council of Agricultural Research was established in 1929 and this body is now responsible for all agricultural research affecting the country as a whole. form a connecting link between the cultivators and the Agricultural Departments, various district and taluka agricultural associations have been started all over the country, and through them the Agricultural Departments organize propaganda work to secure the adoption of new methods and improved implements, as well as the use of pure seeds of improved varieties and new artificial manures. More than 13 million acres are known to be under improved crops and the further area due to natural spread is indeterminable. The Royal Commission on Agriculture authoritatively reviewd the position, and while recognizing what had been achieved, it emphasised the enormous field for future work to which all witnesses had drawn its attention. The agricultural departments have shown that the application of science to Indian agriculture is a practical proposition, and that the individual cultivator can be reached and his methods improved. The problem is how to develop and intensify such work so that a general advance in agricultural practice would result. The situation created by low prices for all agricultural produce, and intense competition in world markets from production in excess of effective demand, can be only met by increased efficiency in our agriculture.

The Handicaps of Agricultural Departments. The greatest handicap of the agricultural departments is the paucity of funds

placed at their disposal. It was very late in the day that government awoke to its responsibility to the agriculturist and then for some time its activities in this connection were mechanical and half-hearted. It must be acknowledged that a change for the better has occured in the government policy but even now it is estimated that only about 1 per cent of the revenue of the country is spent on the development of its chief and basic industry. As against that the United States of America spends about eleven times as much on agricultural development as India does, even though its population is only about one-third that of India, and only about 30 per cent of population is supported by agriculture. Besides, the Department of Agriculture in the United States has put in its working an efficiency and drive which are truly remarkable. A recent English writer* describes it thus:

The Department of Agriculture acts like a University. A University has a two-fold purpose: research and tuition. The United States Board of Agriculture acts like a gigantic University. It carries out research by thousands of experts of its own. In addition, research is carried on independently by thousands of experts employed by the richly endowed Departments of Agriculture belonging to the individual States. The results of these investigations and of the experiments made by private societies and individuals are collected, sifted and classified at Washington, and are then communicated to the agriculturists by means of pamphlets, books etc. The United States Department of Agriculture teaches not only by means of its publications it might fitly be described as the greatest correspondence school in the world-but also by lecturing, as does every University.

Again, Japan has a population about one-sixth that of India, and its expenditure on agricultural improvement is five times as much as that of India, without taking into considera-

^{*} J. Ellis Barker, America's Secret (1927) pp. 243-245 quoted by Sir M. Visvesvaraya, Planned Economy for India, p. 43.

tion the fact that the percentage of population dependent upon agriculture in Japan is very much less than it is in India. Under these circumstances it is not surprising that agriculture in India is very backward as compared to some other countries, without taking into consideration other fundamental deficiencies of our agriculture. A drastic revision in the expenditure of public revenues is obviously essential in order to promote the economic welfare of the people, the bulk of whom are agriculturists.

Other State Help. Among other items of state help we may mention protective taxes on wheat and rice imported into the country. This is undoubtedly helpful to the cultivator who grows wheat and rice, but the fact that protection of wheat and rice, which constitute the staple food of the people, should be a necessity even in the Indian market, is a sad commentary on the backwardness of our agriculture. Incidentally, it may be pointed out that the prospects of the exports of these commodities must naturally be very gloomy when they cannot dispense with protection even in the home market. We shall discuss the problems of credit, co-operation and marketing in the chapters devoted to these subjects. But the most fundamental item of state help is the education of the peasantry, and its importance cannot be over-emphasised. Plato justly observed in his Republic that if we solve the problem of education, it will solve all our other problems. Only a tiny fraction of the people in the country is literate. and a cultivator who can read and write is a rarity. The problem of literacy has been solved everywhere in the world by state activity, and the failure of the government in this connection is a severe handicap for the Indian cultivator. The illiteracy of the peasant cuts him off completely from every progressive movement and renders all improvement difficult, if not impossible. Illiteracy aggravates indebtedness as the cultivator does not understand the exact significance of any contract into which he is entering and he is liable to be cheated. It promotes extravagance and improvidence and makes it difficult for him to break though the traditions he

has inherited. Above all it prevents that mass awakening without which any real progress is not possible. Literacy is an indispensable factor in promoting the all-round efficiency of the cultivator. The educational machinery, such as it is, requires to be drastically overhauled in order to bring it in line with the actual necessities of the agriculturist. At present the effect of our educational system is to give the pupil a distaste for manual labour and rural life, and this is due to the fact that though India is predominantly a rural country, it is the urban point of view which is emphasised in our text books and the educational system generally. The machinery for agricultural education consists of agricultural middle schools and agricultural colleges. Agricultural middle schools are technical schools providing a course in agriculture of a practical character, and receiving pupils at the age of about thirteen, after they have undergone a course of general education. The few institutions which have been started have not been a conspicuous success, and there does not seem to be any future for them, untill the standard of agriculture amongst the parents has been sufficiently raised as to recognize the value of agricultural education. Agricultural colleges are intended to train the future personnel of the agricultural departments and to provide teaching in modern methods for those taking to farming as landowners or agents. They are also the provincial centres for scientific research in agriculture. The Royal Commission on Agriculture recommends that all candidates for higher agricultural services should undertake a course of post-graduate training at Pusa. But the most promising feature of agricultural education is the policy of the educational departments in the Punjab and United Provinces to give a rural bias to primary education, and the Punjab has further introduced the teaching of practical agriculture in the vernacular middle schools. Farms are attached to schools where agriculture is taught, and the scheme has met with considerable success and may be adopted by the other provinces as well. But, on the whole, hardly a fringe of the problem has been touched, and the responsibility for agricultural education must be shouldered by

the government. The universities can help by emphasising the importance of the study of rutal economics, a subject which has been comparatively neglected by following the example of England, where the conditions are entirely different and the rural community is comparatively unimportant.

Rural Uplift.* While the actual amount of work accomplished in connection with rural uplift is negligible, it is a healthy sign of the times that both the people and the government show an increasing appreciation of its supreme importance. Mahatma Gandhi, the most dynamic force in India, is concentrating all his energies on the All-India Village Industries Association; and the Government of India has followed, for the first time in history, with a grant of rupees one crore for rural unlift. This is all to the good; and we earnestly hope that the competition between the people and the Government for serving the villager may succeed in rendering him help of which he stands sorely in need. The most important factor in rural uplift is not so much any particular item in the programme of rural reconstruction as a change in the outlook of the villager, and the psychological factor is therefore more important than any material item. How to bring about this change in the outlook of the villager is the crux of the problem; and while no ready made formula for such a change is available, we believe that only a quick and simultaneous forward movement in the social, economic, political and educational spheres can bring it about. most interesting experiment in connection with rural uplift was conducted by Mr. F. L. Brayne in the Gurgaon District in the Punjab. The experiment at Gurgaon was an innovation. It aimed at the enforcement of a comprehensive programme of village uplift by an intensive use of all practicable forms of propaganda such as lectures, cinema, loud-speakers etc. Never before in any part of India was propaganda for village improvement used so intensively and extensively and with such full use of official authority. The

^{*} Cf. Indian Economics-Jathar & Beri, Vol. I, pp. 354 et seq.

experiment has not been as successful as was hoped for; and two principal reasons for its failure have been that all the details of the programme had not been carefully worked out; and secondly, the driving force behind it was official authority and propaganda, and the docile but reluctant villager submitted as long as the external pressure was strong and continuous. Further, a sufficient account was not taken of the diversity of local conditions. The success of the experiment was ephemeral. But it has furnished us with some very useful object lesson: there must be careful and detailed study of the local problems; education and persuasion, as opposed to propaganda and authority, must be the basis of reform; the problem of rural uplift cannot be successfully tackled through individual effort; and finally, a definite, well-planned and persistent campaigu against the many evils affecting the countryside can yield tangible results within a reasonably short period. The Agricultural Commission has drawn attention to another Punjab experiment, the Central Rural Community Board for the province, which is composed mainly of officials. This is linked up with a Rural Community Council for each district which is composed mainly of non-officials. The districts council receives help from the various departments concerned with rural reconstruction, such as Agricultural, Educational, Co-operative, Medical and Veterinary, and it co-ordinates the propaganda work of these departments. The finances are provided by Government Among Indian provinces the Punjab is far ahead in rural uplift and its effort is both comprehensive and concentrated. Opinion is veering round that a single agency entrusted with the entire work of rural uplift would prove more effective.

Royal Commission on Agriculture. The Royal Commission on Agriculture was appointed in 1926. It is the first commission appointed to examine and report on the condition of agriculture in the country. While agriculture supports about three-fourths of the Indian population, it is sad to reflect that the first comprehensive effect to examine the condition of the agriculturist was made so late as 1926, while innumerable commissions and committees have been appointed to examine

and report on comparatively minor issues. Even so its comprehensive character was sharply limited by its terms of reference. which specifically stated that "it will not be within the scope of the Commission's duties to make recommendations regarding the existing systems of landownership and tenancy or of assessment of land revenue and irrigation charges."* These reservations are of vital importance and seriously detract from the value of the investigations and report of the commission. The conclusion cannot be resisted that the agriculturist in India has been badly neglected, and this neglect is largely responsible for his present unenviable lot. We may, however, derive what comfort we can from the fact that there is some change in the angle of vision of the Government, and though very late in the day, Government is partly awakening to its responsibility to the agriculturist. The report of the commission has done one useful service in making a comprehensive survey of the measures of rural uplift undertaken in different provinces. It is rather curious that so far there has been no attempt on the part of the provinces to co-ordinate their activities in this field with a view to benefiting from the experience gained by each. We believe that this state of affairs would come to an end after the publication of the report. The recommendations of the commission which are dealt with in the different chapters on agriculture are, in their very nature. of a general character; and before any specific action can be taken, each province will have to undertake an intensive local survey of the agricultural conditions in different areas, and to devise measures accordingly.

Imperial Council of Agricultural Research. The most important positive recommendation of the Royal Commission on Agriculture is in connection with the organization of agricultural, including veterinary, research which is ultimately the foundation of all agricultural progress. Government immediately took action on it and the Imperial Council of Agricultural Research was created in 1929. Its primary function is to promote, guide and co-ordinate agricultural research through-

^{*} Agricultural Commission Report, p. ii.

out the country; and the various departments of agriculture. without being subjected to any administrative control look to it for guidance in all matters connected with agricultural research. It serves as a clearing house for all information in connection with agriculture between the various provinces in the country and between India and other countries. It also makes arrangements for the training of research workers. The Imperial Council of Agricultural Research is divided into a governing body and an advisory board. The governing body is presided over by the member of the viceroy's executive council in charge of agriculture, and consists of provincial ministers of agriculture, representatives of Indian legislature and commercial interests, a whole-time vice-chairman who is the principal administrative officer of the council, and two members of the advisory hoard. The latter body, whose duty it is to examine all proposals in connection with research, consists of the principal administrative officer of the council as chairman, two whole-time officers, one agricultural and the other veterinary, as members, and a number of other nominated and elected scientific members, such as provincial heads of agricultural and veterinary departments, and representatives of Indian Universities, the Indian Central Cotton Committee, the co-operative movement, and a few other members. The Governor-General in Council can nominate additional members both to the governing body and the advisory board. The advisory board meets twice a year in a different place each time, and thus visit all the provinces in turn. But the actual business of the board is continuous throughout the year and is carried on by means of special committees such as the sugar committee. the locust committee, the indigenous manure committee and others. The Agricultural Commission recommended an initial endowment fund of Rs. 50 lakhs; but the Government of India have given an initial lump grant of Rs. 25 lakhs, supplemented by a fixed minimum grant annually. When the full scheme is set going, the annual grant would be Rs. 7'25 lakhs of which Rs. 5 lakhs would be devoted to research and Rs. 2 25 lakhs to the cost of the staff and secretariat. A number of Indian

states have given grants to the council and have got their representatives on it. The council has no permanent research institute of its own and its normal method of promoting agricultural and veterinary research is by means of research grants to existing institutions. Provincial Research Committees have been formed in all the provinces as recommended by the Royal Commission, and they work in co-operation with the Imperial Council. A number of grants to different universities and scientific institutions have been made for the investigation of specific problems.

II. LAND TANURES.

Historical Background of Land Revenue. Land revenue. that is claiming by the state of a part of the produce from the land, has existed in India since times immemorial. The Laws of Manu mention one-sixth of the gross produce as land revenue; and originally it was collected in kind and not in cash. This system had its own advantages, and as the share of the state varied automatically with the produce, an elaborate system of remission and suspension of land revenue was superfluous. But with the growth of population, the extension of cultivation, and expansion in the size of the state, such a system became unworkable, and sooner or later money economy came into use. Many settlements were made at different times by different rulers; and among them the elaborate settlement of Todar Mal, the able finance minister of Akbar, stands out as pre-eminent. A systematic and detailed study of different kinds of soils was made; land was carefully measured and divided into four classes according to its fertility; the share of the state was fixed at one-third of the gross produce; and the term of settlement was fixed at nine years. The Mughuls did not introduce any fundamental changes in the land revenue system of the Hindus, but the customs and usages of the Hindus were systematized, and regular records and revenue accounts were kept. After the death of Aurangzeb when the Mughul authority was falling to pieces, a system of revenue

farming came into use, as the central authority was increasingly unable to realize the land revenue from distant parts of the country. Under this system the right of collecting land revenue was sold by public auction. In the beginning the revenue farmer was controlled by state officials and his office was not hereditary; but as the control of the centrol authority relaxed with the gradual break-up of the Mughul empire, the revenue farmer consolidated his position by taking full advantage of the political disorganization. It is hardly necessary to add that the ryots suffered heavily at the hands of these revenue farmers whose only interest was to extort money from the cultivators by every means in their control. And there was no power in the land to check this oppression. When the British acquired political power, Lord Cornwallis, used to the western ideas of landowning, translated these revenue farmers into full-fledged zemindars, who are thus the creation of the British regime. It is interesting to observe that while revenue farming was widespread, its effects were by no means uniform; and while in Bengal it developed into the zemindari system under the British auspices, in Deccan it left hardly any permanent traces behind: and in the United Provinces and the Punjab, more or less, the revenue farmers acquired only certain overlord rights. The net effect of the system of revenue farming was seen in the increasing complexity of land tenures and rights.

Three Main Types of Land Tenure. I, and tenure, that is the way in which land is held, determines the person or persons responsible for the payment of land revenue, the recognition of the various interests and rights in the land, and the nature of the unit of assessment adopted. The system of land tenure in this country exhibits almost every conceivable variation, from large estates with thousands of tenants to tiny holdings which are less than an acre in size. The three main types of land tenure in the country are the ryatwari, the zemindari and the mahalwari. In the ryatwari system land is held in single, small, independent units and the individual holders are separately responsible for the payment of land revenue. In the

zemindari system generally one individual or at most a few joint owners are recognized as landowners of considerable estates and are responsible for the land revenue of the whole estate. And in the mahalwari system there are smaller village estates which are held by co-sharing bodies or village communities, the members of which are jointly and severally responsible for the land revenue.

Two Main Types of Village Constitution. The internal constitution of the village has an important bearing on the question of land tenure and the form of revenue settlement. and so we must study it. There are two main types of villages in India. In the ryatwari village, land is owned and cultivated separately by the various owners. The waste land of the village may be used by the villagers for grazing and woodcutting but it is the property of Covernment. Land revenue is assessed on each seperate holding and the particular individual is responsible for its payment. The individual cultivators enjoy in common the services of the village artizans and menials and are subject to the common village officials. But apart from these, the individual cultivators are not tied down together. The village headman and the other village officials enjoy greater power and prestige in the ryatwari village than in the zemindari village. The ryatwari village is pretty universal in the country, and before the creation of the zemindars under the British regime, it existed everywhere. At present it prevails in Bombay, Madras, Bihar and Central India

The zemindari or joint village is owned by a single individual or his descendants, and in either case it is treated as a single unit. While generally the individual zemindar does not cultivate himself, at times some of the co-sharers engage in the work of cultivation. The waste land is the property of the village community and can be partitioned or cultivated without the leave of the Government. The responsibility for the payment of the land revenue rests with the individual zemindar, and in the case of co-sharers, they are jointly and severally responsible for the payment. The common affairs of the village are managed by the representatives of the leading

co-sharers, and while there is no village headman, an individual may be selected to deal with the Government in connection with land revenue etc. This type of village is strongly developed in the Punjab and is representative of Muslim ideas. just as the ryatwari village is representative of Hindu ideas. The origin of zemindari villages is quite interesting and is generally due to joint inheritance from a common ancestor who may have acquired it as the result of a special privilege, a grant, unsurpation, or the dismemberment of a ruling family and its territory. In some parts of the country, as in Bengal, Oudh and Agra, there are large zemindari estates which include a number of villages. The present holder is generally a descendant of a former ruler, or a revenue farmer or some high official, a grantce, jagirdar or inamdar. There is a great deal of complexity in the zemindari land tenure due to historical circumstances such as wars, tribal and local conquests, the rise and fall of ruling families and so on.

Sub-Proprietary Rights. As a result of war, conquest. grant or revenue farming, on the one hand there was a superimposition of rights, and on the other hand original proprietary rights degenerated into sub-proprietary or tenant rights. The result was a great deal of confusion in connection with rights in the land and a very complicated system of land tenure in the zemindari tracts. While in the ryatwari tracts generally speaking the cultivator is also the landlord, in the zemindari tracts a number of intermediate interests have come into existence and the Bengal Banking Enquiry Committee* cites an extreme example of one estate in Backarganj where there are as many as thirty intermediaries between the proprietor and the cultivator. But generally speaking the principal interests in the land vary from one to four. When the Government is the sole proprietor of a piece of land, there is only one interest; in the rvatwari tracts there are two interests: Government which receives land revenue and the rvot who owns and cultivates the land; in the zemindari tracts there are three interests

^{*} Quoted by Jathar and Beri: Indian Economics, Vol. I, p. 370 footnote.

as there is also the zemindar who is an intermediary between the Government and the actual cultivator; and there are four interests when the intermediaries between the Government and the actual cultivator are a zemindar and a sub-proprietor, or an overland and an actual proprietor. Obviously the number of intermediaries cannot be limited to any fixed number, and we have dealt only with the principal types. In recent years there has been a strong tendency, more particularly in the permenantly settled tracts and where an inferior landownership has been in vogue, for these intermediaries-patnidars, darpatnidars, se-patnidars etc.—to multiply, with the result that the legal status and the economic position of the actual tillers of the soil have been steadily lowered. A paini tenure is held by the lessee and his heirs at a rent fixed in perpetuity and it can be sub-let on the same conditions as those by which the lessee is bound to the proprietor. In the Central Provinces the artificial creation of the malguzars, in pursuance of the policy to fix the responsibility for land revenue on one man for a village which was ryatwari in character, necessitated the recognition of sub-proprietary rights. And lastly, some villages in Oudh were able to maintain their right of independent management, subject to the payment of a fixed rent to the overlord talukdar. A separate sub-settlement, which fixes the rent due to the talukdar, recognizes their sub-proprietary rights.

Tenant Rights in Zemindari Tracts. In general, the reasons which account for the rise of landlord and overlord rights, also account for the existence of tenant rights of different grades, which are ultimately determined by the strength of the pressure exerted from above. The greater the pressure from above, the lower became the status of the tenants; and those who are now classified as tenants must have enjoyed a superior status at one time. In defining and protecting the rights of the tenants by the state, a distinction had to be adopted between the permanent tenants who could bring forward definite proofs of the circumstances and origin of their tenancy rights, and the temporary tenants who could not do so. To meet the case of the latter, in some provinces like Bengal,

Agra and Central Provinces, the tenancy act provided for the recognition of the occupancy rights of the tenant, provided he had cultivated the same land continuously for twelve years. The landlords evaded it by making it impossible for a tenant to hold the same piece of land continuously for twelve years; and the state followed by amending its legislation which now required the cultivation of some land in the same village continuously for twelve years, and not necessarily the same piece of land. The Bengal Tenancy Act of 1885 has served as a model for this type of legislation. In the Punjab, the rights of occupancy cannot be acquired by mere lapse of time, but are based on certain historical grounds. An attempt has been made by tenancy legislation in different provinces to secure the permanent rights of occupancy to old tenants with some vested interests in the land. While the occupancy tenants constitute by far the most important class of privileged tenants in zemindari tracts, there are also some other kinds of tenants who occupy a status in some cases higher, and in others lower, than the occupancy tenants. For example, there are a superior class of tenants in Begal known as tenure-holders and rvots at fixed rates, who can neither be ejected nor made liable to enhancement of rent. (In the other hand, there are certain inferior tenants like tenants-at-will in the ryatwari areas, but entitled to a certain amount of protection not available to the latter.

Characteristics of Occupancy Privilege. The essence of occupancy privilege is fair rent, fixity of tenure and free transfer. This principle is carried out in practice by a number of detailed provisions governing the rights of the occupancy tenant. A limit is set to the enhancement of rent both as regards the amount and the period which must elapse before rent can be increased; enhancemet can take place only as a result of mutual agreement or by a decree of a court on specific grounds; and rent is paid in instalments. The occupancy tenant has reasonable protection against arbitrary ejectment. The occupancy right is hereditary and can be alienated on certain conditions. Certain essential necessities of the culti-

vator, like cattle, tools and seed-grain, are exempt from attachment for failure to pay rent. Remissions and suspensions of land revenue granted by Government to landlords in a bad year must be followed by corresponding concessions to the tenants. And lastly, the right to make improvements on the land without enhancement of rent is also secured within certain limits. The great disadvantages of state machinery for the adjustments of rent, however, are its inelasticity, complexity of procedure and expensiveness. Arbitration could settle up the dispute more quickly, cheaply and satisfactorily.

Tenant Rights in Ryatwari Tracts. As we have already pointed out, as a rule there are no intermediaries between the state and the actual cultivator of the soil in ryatwari tracts, and so there is not the same necessity for the protection of the rights of the tenants as exists in zemindari tracts. There are, however, some zemindari estates even in ryatwari tracts, and these are provided for by special tenancy acts. There is no special legislation for the protection of the ordinary tenants under a contract in ryatwari tracts, and the general tenancy law enforces the terms of an agreement between the parties. or failing an agreement, the general usuage in the locality in question. But the present tendency is for tenancies to multiply and the competition for land among the tenants is excessive. Legislation on the lines adopted in zemindari tracts is becoming a necessity.

Settlement. A settlement is a technical term and means the determination of the share of the state in the produce from the land, the person or persons liable to pay it, and the record of all the private rights and interests in the land. It is obvious that the last item is far more important in the zemindari than in the ryatwari tracts. A settlement is a very elaborate and complicated piece of business, and requires a detailed survey of the land and the preparation of a comprehensive map of each village, which records the exact amount of the cultivable land, the extent of each kind of soil requiring its own rate of assessment, and complete account of all kinds of rights in the land. These records are kept up-to-date by

a system of public entry and registration of all changes; and the rights thus recorded are presumed to be legally valid, until the contrary is proved. The past history and the present condition of the village is also recorded. There is no single system of definite principles for the assessment of land revenue. The basic principles differ from province to province, and not only are they modified by the introduction of a number of miscellaneous factors, but a very large discretion is allowed to the Settlement Officer. The theoretical basis of assessment in the United Provinces, the Punjab and the Central Provinces is the economic rent: in Madras and Burma it is the net produce; and Bombay has had the unique distinction of not even professing to follow any principle, the determination of land revenue being arrived at by the general economic considerations as they impress the Settlement Officer. After the land revenue for a particular estate is fixed, in some cases subsidiary proceedings are necessary to determine the distribution of this total among co-sharers, and the adjustment of rent among the tenants. Land revenue is collected not in one sum but in instalments, to suit the convenience of revenue payers and to avoid too great a demand for cash payments at one time. The procedure for the recovery of revenue arrears is strict in tracts under permanent settlement, while it is much less strict in temporary settled areas. While in the former the sale of the land is the first step to be taken, in the latter it is usually the last of a series of steps. Suspension and remission of land revenue, for whatever reason, does not take place in the areas under permanent settlement and neither is it necessary. But in the areas under temporary settlement, any serious disaster, such as the failure of the monsoon, floods, blight or a catastrophic fall in agricultural prices like the present one, makes the suspension or remission of land revenue an urgent necessity, as the agriculturist cannot possibly pay it. Relief is supposed to be graded according to the nature and extent of the disaster.

Different Kinds of Settlements. Time is the fundamental principle for the classification of settlements. A permanent

settlement, as in Bengal, means that the land revenue is fixed in perpetuity; a temporary settlement, as elsewhere in the country, means that the land revenue is fixed for a certain period. The period of settlement varies from twenty years in the Central Provinces, to thirty years in Bombay, Madras and United Provinces, and to forty years in the Puniab. Settlements may also be classified according to the system of tenure; and corresponding to the zemindari, mahalwari and rvatwari tenures are the settlements in these tracts. zemindari settlement may be permanent as in Bengal or temporary as in Oudh. The mahalwari and the ryatwari settlements are all on a temporar basis. Representative examples are the mahalwari settlement in the United Provinces (in those areas where there are no talukdars) and the Punjab, and the malguzari settlement of the Central Provinces; and the ryatwari settlements of Madras, Bombay and Bihar.

Zemindari Settlement and Permanent Settlement. Towards the end of the Mughul empire the central authority was ineffective and the regular system of revenue administration evolved under Akbar had fallen into hopeless decay. The development of revenue farming, which was resorted to in order to collect the land revenue by any means, led to a ruthless oppression of the ryots; and there was no authority anywhere to check the revenue farmer. In the early years of the British regime, under Clive's Dual Government, the condition of the ryot was still worse; neither the Nawab nor the East India Company felt any responsibility for the administration; and the ryot was oppressed by both and protected by neither. The system of annual leases for the collection of land revenue, sold by public auction to the highest bidders, forced the lessees to screw out the last farthing from the peasants; and the anxiety to carn high dividends for the shareholders of the East India Company was at the root of it. The decay of agriculture and the terrible famines which followed served only to intensify the difficulties. Lord Cornwallis was sent out to put matters right and the Permanent Settlement was his most important administrative measure. The revenue farmers were converted

into zemindars with full proprietary rights, subject to the punctual payment of land revenue which was fixed in perpetuity. The assessment was fixed very high and approximately at ten-elevenths of the rent realized from the ryots; and the remaining one-eleventh was left to the zemindar as a return for his trouble and responsibility. But with the growth of population and rise in prices, this high assessment has become a very modest one in course of time. The permanent settlement, which was an extremely important measure, was effected in a rough and ready way, without any detailed survey, classification of soils and a record of different rights in the land. The position of the ryot under it was entirely hopeless, as he lost his proprietary right in the land, and was left entirely at the tender mercies of the zemindar who immediately proceeded to rack-rent him. The extremely heavy assessment, which was exacted with the utmost vigour, further contributed to the sad plight of the ryot; and he had to wait about three quarters of a century before he got any relief from the grievous wrongs that he had suffered so long. While Bengal is the classic home of the permanent settlement, it is not entirely confined to the province. Following the Bengal example, it was introduced into Benares and some parts of Madras, extending to about onefourth of the presidency. The subsequent history of the permanent settlement has been that, though it was revived off and on, the British Government has been averse to restricting its land revenue in perpetuity, and in recent years the attitude of the Government has been to regard the question of permanent settlement as closed. In some parts of Bengal and in Oudh, there is temporary settlement with the zemindars; and it would be incorrect to identify zemindari settlement with permanent settlement.

Mahalwari Settlement. The temporary settlement as developed in Agra is the typical form of mahalwari settlement. With a few individual exceptions in the province of Agra there was no person occupying a superior status over the village bodies; and therefore a settlement was made directly with these village bodies, and the co-sharers were made jointly and indi-

vidually responsible for the assessment. The rights of the Agra talukdars were quite inferior as compared to Oudh talukdars. and their claims were disposed of by a payment of ten per cent of the land revenue from the Government Treasury as talukdari allowance. Under the settlement an individual co-sharer can move for "a perfect partition" of separate and individual revenue liability in place of the joint liability. The basis of assessment under the mahalwari system is the rental value of the land, and land revenue is a fraction of the annual assets of the estate. Originally this fraction was very high, and even at present it is about one-half. While the general principle of assessment in the different mahalwari settlements in Agra. Oudh, the Punjab and the Central Provinces is the same, there are naturally differences in detail in the various provinces. In Oudh the system generally is the same as in Agra, except that the settlement generally is with the talukdar and not with the village communities. In some cases a sub-settlement is simultaneously entered into with the village communities, the payment to the talukdar is fixed, and in any case his profit is not less than 10 per cent. of the land revenue. In the Punjab the number of tenants is not considerable and most of them pay in kind. The settlement officer has to work out the cash value of the rent. Further, while theoretically the revenue is collected from co-sharers who are jointly and individually responsible for its payment, in actual practice the share of the land revenue due from each individual cultivator is clearly determined, and his position is generally the same as that of the peasant proprietor in Bombay and Madras. In the Central Provinces the malguzar, who was a revenue farmer under the Marathas, was promptly converted, by the British anxiety to deal with individual landlords, into a landed proprietor. Thus at one stroke the peasant proprietors in these ryatwari tracts were converted into tenants; and it has been found necessary to give them extensive protection against the malguzar in the determination of rent, which is fixed by the settlement officer, and is a very elaborate and complicated piece of business. The method of calculating the rental value is more accurate in the

Central Provinces, as it determines rent itself and not merely the land revenue.

Ryatwari Settlement. While the main features of the ryatwari settlement in the different provinces are the same, the details differ. As we have already seen, in the ryatwari tracts land is held in single, small, independent units and the individual holders are separately responsible for the payment of land revenue. There is an accurate survey of each village, lands are classified according to the productivity of the soil, and a village map with a descriptive register of all holdings is prepared. In Madras the principles of settlement are not embodied in any statute. The upper limit of land revenue is fixed at one half of the net produce; and the latter is arrived at by estimating the poductive capacity of the soil in terms of one of the ordinary grain crops, commuting it into money on the average price level of twenty non-famine years previous to the settlement, and deducting from it the expenses of cultivation, trader's profits, and transport charges to the nearest market. In Bombay, unlike Madras, there is a laud revenue code which regulates all matters connected with the settlement, and there are special acts to deal with special classes of estates like those of the talukdars in Guirat and the khots in the Kokhan. The basis of the land revenue settlement in Bombay was the Joint Report issued in 1847 by Messrs. Goldsmid, Wingate and Davidson. They recommended, as suited to the conditions of Bombay Presidency, a moderate assessment, settlement for thirty years, protection of improvements from taxation during the term of settlement, recognition of property in soil, and perfect freedom with regard to sale, transfer and rents to be charged to sub-tenants. The basis of net profits for the classification of land has been turned down, and the depth and texture of the soil, its capacity for retention of moisture and other physical properties bearing on fertility, are taken into consideration instead; and general factors like rainfall, agricultural prices and the prosperity of the land are also to be considered in the classification of the soil. After the land has been classified, the next step is the determination

of the aggregate revenue demand for the area (say a taluka) with reference to its revenue and economic history (that is general considerations as they impress themselves on the settlement officer). And the last step is the determination of revenue liability from aggregate to detail. It is obvious that subjective impressions of local knowledge and experience (or individual idiosyncracies) play a greater part in the settlement than the objective working out of results based on any well defined principle. In recent years the rental value is also taken into consideration in fixing the assessment. The increase in assessment is limited to 33 per cent. on the total for a whole taluka, 66 per cent. for a village, and 100 per cent. for a single holding. In theory, private improvements are entirely exempted from increased assessment; but in practice, too much is left to the judgement of the settlement officer. The title of the cultivator to his holding is indestructible so long as he continues to pay the assessment; and full occupancy rights can be inherited and transferred without the permission of Government.

Is Land Revenue a Tax or Rent? The question whether land revenue is a tax or rent cannot be answered in a caterigical and unambiguous fashion; but in any case, for all practical purposes, it does not very much matter; and it is far more important that land revenue should not press heavily on the cultivator, rather than whether it is called a tax or rent. In discussing the question, the Taxation Enquiry Committee framed the following specific issues: Did the state claim exclusive proprietary rights over the land under Hindu Rule or under Muslim Rule? Did the British Government succeed to any such rights? Is the state now proprietor of land held on zemindari or ryatwari tenure? If not, are the zemindars or ryots respectively the possessors of proprietary right subject to the payment of land revenue? Should the land revenue be described as a tax or rent? As regards the proprietary rights over the land under Hindu or Muslim rule, the Taxation Enquiry Committee unanimously held that the state never claimed any such right over the land before the British regime;

and therefore the British Government did not succeed to any such rights. As the Laws of Manu put it, "Land is his who first cleared away the jungle, as the deer is his who first brought it down." And an elaborate judgment by the Bombay High Court in 1875 held that the proprietary right of the sovereign in the land is not supported by the ancient laws or institutions of the Hindus, and is not recognized by modern Hindu lawyers either. The position under the Mohammedan Law is more or less identical. The only exception is the period of unsettlement between the death of Aurangzeb and the establishment of British rule, and its historical or legal validity is small. And the general trend of British policy has been to admit private ownership in the land. So far as the zemindari estates in Bengal and elsewhere are concerned, it is generally admitted that private ownership in land is beyond any dispute; and so far as waste lands are concerned, it is generally admitted that state ownership in land is beyond any dispute. But opinion is sharply divided about ryatwari lands. On the one side it is argued that the position of the ryot is not essentially different from that of the zemindar, that he is the full proprietor subject to the payment of land revenue, and that the maximum claim of the Government is that, in the last resort, the land is security for the payment of land revenue. Under the ryatwari tenure, as opposed to the zemindari tenure, land can be relinquished at the option of the holder; and this feature came into existence on account of the reluctance of the cultivator, owing to his bitter experience in the period of unsettlement, to be tied down to the land, and made permanently responsible for the payment of land revenue. But this is too slender a foundation for building up the theory of state ownership. Another argument of greater value in favour of state ownership is that in some provinces agricultural land cannot be put to non-agricultural uses without the permission of the state; and that it is further liable to revised assessment when such permision is given. The conclusion of the Taxation Enquiry Committee is that both the zemindars and the ryots are possessors of proprietary right, subject to the payment of land revenue; and in the case of the

ryots, it is not possible to arrive at an exact and general defination of the position of the landholder. This is a fairly reasonable conclusion. The fact of the matter is that the Indian conception of land ownersip is a compromise between the English idea of absolute individual property on the one hand, and absolute state ownership on the other hand; and the position is not materially different whether we call it restricted state ownership or restricted private ownership.

The issue whether the land revenue is a tax or rent ultimately depends upon whether the land is owned by the private individuals or the state, which we have just discussed in detail. But a few additional points which have been urged in this connection may be noticed here. It is argued that land revenue is similar to rent because it cannot be altered according to the exigencies of the state during the long period for which it is fixed. On the other side it is urged that there is nothing to prevent the state from fixing its share annually, and it is not done because considerations of policy, expediency and economy dictate otherwise. Further, it must be borne in mind that rents on private lands are not necessarily fixed for long periods and many leases run for a year. As for the free use of common grazing lands and building sites, an enlightened state can grant these comparatively small concessions without thereby establishing the right of laud-ownership. The argument that land revenue is a tax because the process of its assessment and collection is similiar to that of a tax is rather trivial. It is further urged that the Income-Tax Act exempts agricultural incomes, and this implies that agricultural incomes already pay a tax. But even that argument is not conclusive; as on the one hand English landowners pay both a land-tax and an income-tax, and their right of private ownership in land is not open to dispute; and on the other hand, the state can impose an income-tax on agricultural incomes. The fact of the matter is that it is a profitless war of words and the issue has been magnified because of the existence of a foreign government and a sharp conflict of interests between the state and the people. The essence of the matter is that the assessment on the heavily

burdened ryot should be as light as possible; it does him little good, if the land revenue is unequivocally recognized as a tex, and yet it presses so heavily on him that he cannot procure even the bare necesssities of life; and it does him little harm if the land revenue is unequivocally recognized as rent, but his present rights of sale and mortgage are left intact, and the assessment is moderate. And the practical issue of the rate of assessment is unaffected whether land revenue is a tax or rent; because while the state as the universal landlord can exact the full economic rent, without being landlord, it can absorb the whole of the economic rent in land tax. The practical issue of the ownership of land is equally unaffected, because whatever may be the conclusion of learned bundits. the unsophisticated cultivator has no doubt in his own mind that he is free to sell, lease, mortgage or inherit landed property; and as nobody is prepared to interfere with these rights. the cultivator is content to leave the academic issue to the pundits. From the point of view of incidence of taxation, the Taxation Enquiry Committee rightly held that land revenue should be regarded as a tax because it forms a deduction from the national dividend. And finally, all important questions of land revenue policy can be and are discussed without any sustained reference to the issue whether the land revenue is a tax or rent.

Permanent Versus Temporary Settlement. The question of a permanent settlement in the country is not a vital issue to-day, and it does not now count as many adherents as it once did either among the officials or the non-officials; but on the other hand it is not altogether a dead issue. The traditional arguments usually put forward in favour of a permanent settlement are that it has avoided the evils associated with temporary settlements, such as the harassment of the cultivator at the hands of revenue officials not liable to legislative or judicial control, the expensive machinery required for re-settlement, the deliberate neglect and deterioration of the land towards the end of the term of settlement in order to avoid an enhancement of assessment, and the discouragement of industry and

enterprise on the part of the cultivator, who fears that instead of enjoying an increased produce, he might suffer from an increased assessment. Further, it ensures to the state a fixed and stable revenue; stimulates agricultural enterprise and prosperity; and brings into existence a resourceful peasantry with considerable staying power against adverse circumstances, and a class of zemindars who act as the natural leaders of the people and who are loyal to the Government.

The strongest and most obvious argument against the permanent settlement is that it involves a heavy sacrifice on the part of the state of all the future unearned increment from the land. The extent of the sacrifice may be measured from the fact that while from 1793 to 1924 the income of the Bengal zemindars has increased from Rs. 400 lakhs to Rs. 1,468 lakhs, the land revenue practically has not increased at all. Again, in Bihar the revenue fixed under the permanent settlement is about 10 or 15 per cent of the rental assets of the land, while the present standard is 50 per cent.* It is obviously unfair that this substantial increase in the produce from the land, which really belongs to society, should be appropriated by individual zemindars under the permanent settlement; and even those who advocate the permanent settlement are considerably influenced by the unnatural antagonism between the state and the people which exists in India. The case against the permanent settlement was effectively summed up by Lord "It involves a sacrifice of the share of the state in the growing values of land and perpetuates assessments which become more and more uneven as time goes on. Any measure, which tends permanently to limit the share which any class is called upon to contribute to the general revenues, is almost certain to result in an unfair burden on the other classes. India's place in the commercial markets of the world and the intricacies of her financial and social problems have brought many new factors into the picture which necessitate elasticity

^{*} Radhakamal Mukherjee: Land Problems of India, p. 306.

of public revenue and expenditure." The zemindars have not fulfilled the expectations that were formed about them, and far from acting as the guardians of the interests of the cultivator, they have largely confined their interests to the realization of rent; and the evils of absentee landlordism, management of estates by unsympathetic agents, and the multiplication of various middlemen between the zemindar and the cultivator, have been rampant. It is also said in favour of the temporary settlement that under it elasticity is given to the burden of revenue by suspensions and remissions in unfavourable years.

A Solution of the Problem. The case against the permanent settlement is very strong; and the state of things under the temporary settlement, in which the land revenue is a very heavy burden on the small cultivator, is far from satisfactory. In our opinion the solution of the problem lies in permanent settlement, coupled with an income tax on agricultural profits. This solution would give us the advantages of both the permanent and temporary settlements, without their accompanying evils. On the one hand the demand from the agriculturist and the land revenue would be fixed, the arbitrary exercise of power by the revenue official would be curbed, and the incentive to industry and enterprise would be maintained at its maximum; and on the other hand through income tax the state can share in the unearned increment from land, barring the minimum which is necessary for the maintenance of the cultivator. This method would have the additional advantage of bringing our land revenue policy in line with advanced European countries like France and Italy, where the flat rate is kept relatively low and there is a general income tax on agricultural profits. To the objection that the bulk of the cultivators have very tiny incomes which cannot possibly be subjected to income tax, and that land revenue would consequently suffer in future, the obvious answer is that the increase of land revenue is not an end in itself, and it is presumably realized for the good of the people. On the other hand the

large landowner will be made to contribute his proper share to the state, and an element of progression can be introduced by a steeply graded income tax and a heavy death duty. And this method also offers a solution for those areas where permanent settlement prevails at present.

The Term of Settlement and the Principles of Assessment. In the temporary settlement areas, there is a considerable difference of opinion as to what should be the term of settlement, and opinion varies from ten years to ninety-nine years. The arguments in favour of a short term or a long term are more or less identical with the arguments in favour of temporary and permanent settlements. It is more or less impossible to say precisely what is the ideal period of settlement; and in our opinion thirty years is as suitable as any other period. It occurs once in a generation and is neither too long nor too short. In his "Facts and Fallacies of the Bombay Land Revenue System," Mr. Anderson objects that during a long period of thirty yeas, profits and rents increase more than thirty-three per cent., which is the maximum rate of enhancement of land revenue. The argument does not appeal to us, because it assumes a false divergence between the interests of the state and the agriculturists, and secondly in these days of low agricultural prices it sounds rather far-fetched. The principles of assessment, as we have already said, differ from province to province, and not only are they modified by the introduction of a number of miscellaneous factors, but a very large discretion is allowed to the Settlement Officer The assessment in the United Provinces, the Punjab and the Central Provinces is based on economic rent, in Madras on net produce, and Bombay has the unique distinction of not having any basis at all, the assessment depending in each case on general economic considerations. An attempt has been recently made in Bombay to use rental value as a basis of a assessment, and it has been the subject of a fierce controversy. On the one side it is argued that unless the Settlement Officer is tied down to the rental as the basis of assessment, his recommendations are based on vague

and indefinite generalizations which are impossible to verify; and only on the basis of rental value, which can be objectively determined, it is possible to get a just and sound settlement. On the other side it is argued that the recent Bardoli experience has demonstrated conclusively that rental statistics. unless used after a careful and critical scrutiny, are liable to lead to serious error and heavy over-assessment. It is notorious that actual rents are considerably higher than economic rents for a variety of reasons, such as a large number of uneconomic holdings which pay rents and taxes, not out of uncarned increment, but out of a bare minimum of subsistence : the traditional attachment to land; excessive competition among the tenants owing to the absence of alternative empolvment; undue pressure of the landlord as creditor; the influence of a boom period; the payment of rent through sources other than the land; the untypical character of lands under industrial crops which are generally given on rent; the proximity of a particular plot to the holding of a tenant; the comparatively small amount of land which is actually given on rent; and so on. obvious that rental values must be very critically analysed before they can provide a satisfactory basis for the assessment of land revenue; and they must be tested with reference to other factors such as prices, communications, and general economic conditions. What is needed is not merely to find out what is the rental value, but to work out accurately what should be the rental value.

Recommendations of the Taxation Enquiry Committee.
The Taxation Enquiry Committee made some useful recom-

mendations about the basis of assessment and the rate of assessment. In connection with the former, the Committee recommended that a uniform basis of annual value should be adopted in every province, and the function of the Settlement Officer should be to determine the annual value under the particular circumstances in each province. By "annual value" the Committee meant, "the gross produce less cost of production, including the value of the labour, actually expended by the farmer and his family, and the return for enterprise." This

seems to us to be a sound recommendation as it replaces vague generalizations by a definite principle, which makes a due allowance for the labour of the farmer and his family, and the return for enterprise. In addition, an allowance should also be made for the inevitable cycle of droughts in the Indian climate, payment of interest, and the depreciation of agricultural capital, such as it is. As regards the rate of assessment, the Committee recommended a comparatively low standard rate which should not exceed twenty-five per cent. of the annual value. The maximum taxation for local purposes is limited to twenty-five per cent of the revenue, and the Committee recommended that it would be collected along with the land revenue.

Land Revenue and the Principles of Taxation. Land Revenue does satisfy the canon of certainty and the cultivator knows exactly how much he has to pay. There is, however, an element of uncertainty at the time of settlement, particularly as the basis of assessment is vague. As regards the canon of convenience, the collection of revenue is effected in such instalments as suit the convenience of the agriculturist in normal times. The assessment is based on the average of good, bad and indifferent years. The assumption that the savings effected in good years by the cultivator would offset the losses during bad years cannot be regarded as based on actual facts, so that the assessment is oppressive in its effects in lean years. Again, suspensions and remissions lack elasticity, and this inelasticity is responsible for the piling up of the agriculturist's debts in bad years on account of the necessity of meeting the demands of the revenue collector. As for the canon of economy, the expenditure on revenue establishment is very heavy; but as it does a certain amount of miscellaneous work besides the assessment and collection of land revenue, the cost of the latter cannot be exactly worked out. All that can be said with certainty is that the revenue officials at the top are heavily overpaid. As for the canon of ability, it is undisputed that in the case of uneconomic holdings, which constitute the majority of the holdings in many provinces, the ability to pay is nil, and the

land revenue comes out of the less than bare minimum necessary for existence. The official claim is that the share of the state is steadily diminishing and from 1903 to 1924, while prices rose by 117 per cent., the land revenue rose by 20 per cent.; and the actual increase in the land revenue must be lesser still, as part of it has been realized from the increase of about 7 per cent, in the area under cultivation. The heavy slump in agricultural prices since 1929 requires a very substantial modification of this statement; and in any case it does not prove the ability of the average cultivator to bear the burden of land revenue, as owing to the growth of numbers, the decline of handicrafts, and the consequent increase in the pressure of population on the soil, economic conditions have changed materially for the worse for the agricultural classes. And when there is no surplus agricultural produce available for sale, a rise of prices does not benefit the cultivator. Owing to the variations in the systems followed between province and province and even between district and district it is difficult to obtain any general idea as regards the incidence of land revenue. The Taxation Inquiry Committee favoured the acceptance of the ratio borne by the assessment to rents or annual value, in spite of its faults, as the basis; but they could not arrive at any definite conclusion in regard to the burden of assessment in various provinces.

Land Revenue and the Principle of Justice. Land Revenue suffers from serious inter-provincial disparities and it is obvious that its burden in permanently settled areas is much lighter than in temporarily settled areas. Even in the latter, there are considerable variations from province to province and even district to district; and while the percentage of land revenue to net rental is estimated to vary from 19 to 36, with an average of 25, in the recently settled districts of the Punjab, it varies from 20 to 42, with an average percentage of 27, in the United Provinces. In Bombay the percentage varies from 17 to 50 in different parts of the presidency; in Madras, in half the districts, it is about 17 per cent; and in two recently settled talukas of Bihar it is 10 per cent. In the interests of

justice a uniform standard should be adopted, and the burden should be equally shared.

The principle of justice is even more sharply violated in differentiating the income from land and income from other sources. In the case of land there is no tax-free minimum as there is in income derived from other sources; the rate of the tax is much higher in the case of land; and there is no progression in land tax. It is argued that a tax-free minimum in the case of agricultural incomes is visionary and impracticable because it would affect the financial solvency of the state. But in that case, apart from the glaring injustice of it, the financial solvency of the state is built on very flimsy foundations; and further, it is patently absurd that the financial solvency of the state can be built up on the financial insolvency of the ryot. The same argument is applicable to the high rate of the land tax, and as we have already indicated, the solution of the problem lies in a low flat rate which is permanently fixed, together with an income tax on large agricultural incomes. And lastly, the absence of an element of progression is an unfair pampering of landed magnates, as the ryot with his pittance is taxed at the same rate as the big zemindar. In theory the land tax is supposed to be a part of the surplus from land, but in the case of uneconomic holdings, which dominate the picture in India, there is no surplus and yet the land tax is exacted at the usual rate. The land tax stands in urgent need of rationalization; and the present system presses heavily on the poor majority, while the rich minority is lightly let off. The argument that the exemption of uneconomic holdings from land tax would have a tendency to multiply them does not appeal to us, because the problem of uneconomic holdings can be solved only by compulsory land consolidation, and not by land tax.

Land Revenue and Executive Control. It is a curious and characteristic feature of the constitutional position in this country that while on the one hand the foundations of responsible government are supposed to have been laid down, on the other hand land revenue, which is a direct tax on the largest

number of people in the country, is imposed purely by executive fiat. At present in some provinces there is no legislative control and in others it is of a very meagre nature. Both in the interests of political evolution and economic progress, it is necessary that the assessment of land tax should be under legislative control; and the main principles by which land revenue is determined, the method of valuation, the pitch of assessment, the periods of revision, the gradation of enhancements, and the other chief processes which touch the well-being of the land revenue payer, should be immediately embodied in law. A certain amount of progress in land revenue legislation has been made, and in 1928-9, bills embodying the principles of land revenue assessment in a statute were passed by the Legislative Councils of the Punjab, the United Provinces and the Central Provinces. Bombay has a Land Revenue Code for administrative purposes, and contemplates a Land Revenue Law at an early date. It is premature to say how these measures will shape in actual practice. But the principle of legislative control over revenue settlement is gradually coming to be accepted.

Retrospect. The zemindar is essentially a product of British rule and the agrarian system under the Mughuls was fundamentally different. It is estimated that in 47 per cent of the land in the country there is an intermediary between the cultivator and the state. Akbar dealt directly with the cultivator and the revenue collector was instructed to "deal with each husbandman, present his demand, and separately and civilly receive his dues." The cultivator paid the land tax, but he did not have to pay any rent, as he does in the zemindari tracts; and as there was plenty of land available for cultivation, there were no uneconomic holdings; nor were there a series of middlemen between the owner of the land and the cultivator, The disintegration of village communities has been considerably aggravated by the creation of the zemindar, who is a rent receiver and not a wealth producer. The tenancy laws. which the British Government was forced to introduce in order to remedy its mistakes, cannot check all the abuses of irres-

ponsible or absentee landlordism created under its auspices; and the relations between the landlords and the tenants are vusatisfactory. The economic status of the actual cultivators has suffered seriously under the British regime. The suppression of the rights of the village communities by the state has left the cultivators without economic support from their class; and as a result of centralization, village customs and usages have become scereotyped and do not easily adjust themselves to new social and economic needs. Even in the ryptwari tracts whick are estimated at 53 per cent. of the land, there has been a large increase of rent-receivers and tenants The actual cultivator to-day owns about one fourth of the land. The British mishandling of the Indian village tenures and customs is responsible for many of our agrarian problems to-day.

Prospect. The problems of land tenure in this country are so complex that it is not easy to forecast what the future has in store for us. But certain tendencies stand out very prominently, and it is natural to suppose that future changes will be along these lines. The zemindar, who is a rent-receiver and not a wealth-producer, is the target of a very sharp criticism; and a new consciousness of their rights is permenting the actual tillers of the soil. There is a growing recognition that changes in the Indian land system are imperatively called for, and this opinion has now spread to all classes of society. If the vested interests succeed in obstructing reform, they will be laying the foundations of deep discontents which may find their consummation in revolutionary changes. In a country inhabited by a dense agricultural population, the only practical solution in sight at present is the intensive small farming of consolidated holdings; and this must be the objective which must be kept in view in connection with land reform. At the rate at which land reform is proceeding, we must frankly confess that we do not feel very optimistic about a peaceful solution of our most crucial economic problem. So far as one can peen into the dark and mysterious future, the shadow of an approaching agrarian revolution is upon us; and if and when it comes, no man can tell where it will end.

CHAPTER VIII.

AGRICULTURE: THE PROBLEMS OF LABOUR AND ORGANIZATION.

The Backwardness of the Indian Agriculturist. importance of the human factor in the success of agriculture is far greater than is commonly realized; and while man's incapacity can bring to nought the richest gifts of nature, what appear to be insuperable difficulties tend to disappear before the sustained application of human energy and skill. It is therefore necessary in our study of the agricultural problems of the country, to form an estimate of the Indian agriculturist, and to find out how he compares with agriculturists elsewhere. It must be admitted that he is far less intelligent and enterprising than the cultivator in the more advanced countries in the West. But it is necessary to add that the inferiority of the Indian agriculturist is not something innate or irremediable; it is due to the extremely adverse environment and the heart-breaking conditions under which he works This hypothesis is supported by the fact that in areas where the water supply is comparatively dependable and the cultivator can reasonably expect to reap the reward of his labour, he is distinctly more energetic, enterprising and tenacious. Voc!ker, consulting chemist to the Royal Agricultural Society, has borne testimony to his careful husbandry, combined with hard labour, perseverance and resourcefulness. But on the whole our cultivator lacks originality and initiative and is wedded to traditional methods and practices some of which are wasteful and unscientific. His superstitions and prejudices, ignorance and apathy, conservatism and inertia, improvidence and recklessness—those are all factors to be seriously reckoned with. He has a weakness for litigation and ornaments-luxuries which he can ill afford. The obvious remedy is a combined sustained and frontal attack on both the cultivator and his environment.

The Remedies for the Agriculturist's Backwardness: Education. The primary means for bringing about a revolution in the psychology and the environment of the cultivator is to educate him. The problem of primary education everywhere has been solved by the state; and the wide-spread illiteracy of our cultivators, must be set down as an outstanding fault of the British administration. Illiteracy is the root of many evils: among other things it prevents the results of agricultural research reaching the cultivator whom it most concerns; it is the bulwark of all ancient prejudices, superstitions and traditions, however mischievous, and the cultivator cannot even contemplate the idea of progress; it aggravates indebtedness and promotes improvidence and extravagance. It might be argued that education to the extent that it has spread, has not produced any spectacular results. The obvious answer is that the present system of education needs to be radically modified to meet the actual requirements of the people, and to help them in solving their many pressing problems. In a predominently rural country like India the urban bias of our educational system has produced many mischievous results. Cinema and broadcasting have proved elsewhere to be very efficacious instruments of propaganda, and their appeal to the bucolic village mind is likely to be greater than the ordinary spoken or written word. It is obvious that they must be exploited to the utmost for changing the ideology of the agriculturists, but as yet hardly anything has been done in this respect. Demonstration trains which are inn as a result of co-operation between the various departments like Agriculture, Industries, Public Health, and others are also helpful: but spasmodic efforts are likely to achieve very little. and unless a comprehensive programme is worked out and carried on in a sustained fashion, the problem of educating the rural mind, which is ultimately the foundation of all agricultural progress, will remain unsolved.

Public Health. Next only to education comes the question of public health. Large rural areas are ravaged by terrible preventible diseases like malaria, cholera, tuberculosis, etc. which suck the vitality out of the peasant where they do not kill

him outright. It is not surprising to find that this is one of the major causes of the inefficiency of the agriculturist;* and the natural psychological reaction of wide-spread epidemics is lethargy, listlessness and fatalism. Not infrequently it happens that the peasant is laid up and put out of action at the time of crucial agricultural operations with fatal results to their success. A great campaign of public health seems to be the obvious remedy; and though the question of finance will present some difficulty, we venture to think that in the long run a campaign of public health will more than pay its way, in the shape of increased production of wealth and public revenues, apart from the health, happiness and prosperity of the people. Drainage of irrigated areas and marshy swamps and supply of pure drinking water are all indispensable parts of a campaign of public health. Though the prevention of disease is more important than its cure, the total absence of medical facilities in rural areas presents a serious problem. In this connection we venture to think that the indigenous systems of medicine, which still serve the vast majority of the population, and which are far cheaper and every way better adapted to local requirements, deserve to be carefully studied and systematically encouraged. The problem of housing in the rural areas is quite as bad as in urban areas. The average village house is a small, low thatched room with mud walls and mud flooring, and with a single door and no windows. It is naturally ill-ventilated and swarms with mosquitoes and rats. As if not satisfied with this dangerous company, the inmates often provide accommodation in the same room for their more fragile livestock. Though there is plenty of open space in the village, these houses are generally closely huddled together, with a very narrow passage, which also serves the purpose of an open drain and a lavatory for the children, running between uneven rows of houses arranged anyhow. India is a vast rural slum. And the clearance of this slum presents a problem which is as stupendous as it is urgent. So far there is hardly any evidence that the powers that be are

^{*} See antc, pp. 47 and 48

actively conscious of the existence of this problem, and no serious efforts are being made to tackle it.

Rural Communications. Although the isolation of the village is not so complete now as it was in the days gone by. there is still room for further improvement which can be effected by the construction of roads and in some cases by the extension of railways. The contact with the urban areas is the pivot round which the improvement of the rural areas turns, as progressive ideas emanate from the towns and not from the villages. The post office may also be reckoned as an instrument for the improvement of the villager, but the extent to which the post office will be utilized obviously depends upon the prevalence of literacy. The post office is further utilized for making quinine available at cheap rates, and could be utilized as an agency for the provision of good seeds etc. which are urgent necessities for the agriculturists, and it provides a considerable scope for agricultural propaganda. Postal savings banks promote thrift, but the other side of the picture is that they drain rural areas of capital which is urgently needed for financing the rural community; and a suggestion has been put forward that the postal deposits from rural areas should be made available by Government to rural co-operative societies at very reasonable rates of interest. But to-day the greatest possibilities for the uplift of the village community are held out by wireless broadcasting which can be utilized to bring about a very drastic change in the life and outlook of the agriculturist; and we are of opinion that though the immediate future of wireless broadcasting in the country may not be very bright, it will inevitably play a very important role, whenever the problems of the agriculturist in this country come to be seriously tackled.

Agricultural Propaganda. The necessity for a sustained, well-planned propaganda is very urgent, but it is by no means an easy task. The propagandist must be a man of varied gifts: he must be intimately acquainted with the best agricultural knowledge and practice; he must also be quite familiar with the actual conditions and the practical difficulties of the agriculturist in the particular area with which

he is dealing; he must feel genuine sympathy with the agriculturist and must have imagination, energy and tact; and finally he must have the gift of the gab and must succeed in getting into very intimate contact with his rural audience. And the actual reform advocated must have been thoroughly tested and be well within the reach of the agriculturist. The technique developed in this country is the result of centuries of practical experience, and it is necessary to elucidate the principles underlying it, which are none the less important because they have not been properly explained or even stated. And the agriculturist can ill afford to waste anything on experiments.

The Agricultural Labourer. Having dealt with 'the cultivator, we now proceed to discuss the agricultural labourer. One of the outstanding revelations of the last census report is the rapid increase in the number of agricultural labourers which jumped up from 291 labourers per 1000 cultivators in 1921 to 407 labourers per 1000 cultivators in 1931.* It is due to the fact that a large increase has taken place in the agricultural population without a corresponding increase in the actual holders of land, whether as tenants or owners, and some land is also passing into the hands of non-cultivating owners. To this must be added a considerable number of owners of tiny holdings which are so small that they are under the necessity of supplementing their meagre produce by hiring themselves out as agricultural labourers. The efficiency of the agricultural labourer is on a par with that of the cultivator which is poor enough. The agricultural labourers are so disorganized and disenfranchised that in spite of their vast numbers they have not a single accredited representative in the country who could speak on their behalf. But the emergence of a large number of agricultural labourers, which tends to increase, might possibly bring about an agrarian revolution with far-reaching social consequences. It must also be noted that the agricultural labourers, who have no stake in the country at all, and whose occupation is precarrous and poorly paid, will constitue a very large class in the country. The Famine Commission of 1880 observed that

^{*} Census Report, Vol. I, p. 288.

"the numbers who have no other employment than agriculture are greatly in excess of what is really required for the thorough cultivation of the land." Since 1880 there has been an enormous increase in the population without any corresponding increase in the avenues of employment, and the bulk of the surplus population has gone into the very much overcrowded field of agriculture to make its evil plight infinitely worse. What is the solution of this problem which is far and away the most important in our national economy? The Royal Commission on Agriculture has solved it by a cheap generalization, unrelated to the facts, and which merely shirks facing the hard realities of the situation. It observes, "The labour problem is, therefore, from the agricultural point of view, a simple one; to lessen the pressure on the land......The essential condition for relieving pressure on the land is, therefore, in our opinion, mobility,"* that is to say, movement of the population from thickly populated areas to sparsely populated areas either in India or outside. In the chapter on, "The Problem of Population" we have discussed this question exhaustively, and we have shown conclusively that it is really no solution of the problem, and there are no large sparsely populated areas available for the Indian agriculturist either in India or outside. † The fact of the matter is that the problem is an extremely difficult one and does not admit of any simple solution. Without restricting the indiscriminate multiplication of numbers on the one hand, and without a carefully and comprehensively planued programme of agrarian and industrial production on the other, no solution of the problem is possible, and for the time being the country is steadily heading towards a disaster.

The Zemindar. Next to the cultivator and the agricultural labourer is the place of the zemindar or landowner in our rural picture. The principle contribution of the zemindar, generally an absentee landowner who prefers the amenities of the town

^{*} Report, p. 580.

[†] See ante pp. 54 to 55-

to the dull and drab conditions of existence in the countryside, to the rural economy is that he is regular in exacting the rent of the land and acts like a distant suction engine on rural prosperity. Naturally Indian zemindars have not produced from among their ranks any figures corresponding to great English landowners like "Turnip" Townshend, Blakewell and Bates, who made such a substantial contribution to the agrarian revolution in England. The expectation that permanent settlement would succeed in creating landowners of this type, who would be the natural leaders of the ryots for the uplift of the rural areas, has been sadly disappointed; and the evil of absentee landlordism, which is one of the worst that can happen to a rural community, is particularly rampant in the zemindari areas, though it is not unknown even in the ryotwari tracts. The zemindar has badly missed his opportunities, and with his larger capital and intelligence he could have rendered a substantial service to the rural community. It is now being increasingly realized that the zemindar is a big drone in our rural economy; and in return for the substantial rent he receives, he makes no contribution whatsoever. As the agrarian situation is steadily getting more critical, the zemindar evidenty seems to be marked out as the first type which will be squeezed out of existence. And his disappearance is not likely to cause any excessive regret or disappointment.

Urban Contribution to the Solution of Rural Problems. The rural community gets very little advantage of the better brains and enterprise and the capital of the towns, which attract and absorb the most promising material in the rural community, leaving behind a blank which it is impossible to fill. The intelligensia of the towns have devoted very little attention to the study and understanding of the rural problems, and their ignorance of the most elementary facts about rural conditions is so colossal and genuine as to command admiration. The villages have been badly exploited by the towns which have given back little in return to the villages either in a moral or material shape. While the amenities of life in an Indian town are poor enough, in the villages they are almost totally absent; and perhaps nowhere the gap which divides the urban and rural

AGRICULTURE: PROBLEMS OF LABOUR AND ORGANIZATION 163

communities is wider. India is in more than one sense a house divided against itself.

The Methods of Cultivation. The Indian agriculturist combines in his husbandry the evils of both intensive and extensive cultivation: his holding is tiny and instead of cultivating it intensively and making the most of it, he goes in for extensive methods of cultivation and his yield from the land is very poor. Denmark, Japan and China have small holdings which are cultivated intensively, almost like gardening, and yield excellent results; United States has large holdings and extensive methods of cultivation and the production per head of agricultural population is very large. We combine the disadvantages of both the systems and the advantages of neither. It is obvious that the salvation of our agriculturist lies in adopting intensive methods of cultivation. The following table, taken from the statistical year book of the League of Nations (1032-33), gives the average yield of rice and wheat per acre in India and some other countries.

Country.			Rice.	Wheat.
			(lbs.)	(1bs.)
Italy		•••	4,601	1,241
Japan			2,767	1,508
Egypt	•••		2,356	1,688
U. S. A.	•••	•••	2,112	973
United Ki	ngdom		•••	1,812
Germany			•••	1,740
India	•••		1,357	652

Intensive cultivation, which is so obviously necessary in our country, involves among other things, selection of good seeds, proper system of rotation of crops, the use of fertilizers including artificial manures, the use of modern tools and implements, protection from insect, vermin and pests, healthy livestock, cheap and rapid transport, the supply of working capital at

reasonable interest, favourable marketing facilities, not to mention permanent improvements on land and irrigation which we have already discussed. Some of these problems will be discussed in detail in other chapters and we shall make a brief survey of the rest here. The importance of good seed is obvious and the Agricultural Commission* stresses the necessity of the selection and distribution of pure seed of all crops being controlled by the agricultural departments in the manner best suited to the local conditions of each tract. We endorse the view of the Commission that the responsibility of the selection and distribution of pure seed must rest on the agricultural departments. As for the rotation of crops, the Agricultural Commission opine† that whilst the customary rotations have been built up as the result of generations of experience of soil and climate, there is every reason to believe that research and experiment may show ways in which these can be improved. But whilst continued research and experiment on rotations and methods of tillage are necessary, the more important problem in regard to the latter is at present that of bringing home to the cultivator knowledge which is already available. "Among definite improvements we may mention economical methods of transplanting paddy-seedlings, drill-sowing of cotton and other crops and intercultivation with bullock power, and the reduction of the number of setts used for planting sugarcane, to give only a few examples, as improvements which have been thoroughly tested and the advantages of adopting which have been satisfactorily established."

Manure. The use of manure is a vital factor in increasing the fertility of the soil. The manurial problem in India is, in the main, one of nitrogen deficiency; and the country depends almost exclusively on the recuperative effects of natural processes in the soil to restore the combined nitrogen annually removed in the crops, for but little of this is returned to the soil in any

^{*} Report, p. 105.

[†] Ibid., p. 107.

[‡] Ibid., p. 107.

other way. The burning of cowdung as fuel is as wasteful as it is universal in India, and the commonest feature of the landscape in the country is the plastering of the mud walls with cowdung cakes put up there for drying. A large quantity of combined nitrogen is exported in the form of oil-seeds, grains, and animal products such as hides and hones. In this connection it might be observed that the export of these commodities began in the country only under the British rule and a serious deterioration of the soil has set in since then. The use of nitrogenous fertilizers in the country is very small. In 1925-26 for the first time the imports of sulphate of ammonia which amounted to 4,724 tons, exceeded the exports, and the greater part of the production of this fertilizer by the Tata Iron and Steel Company at Jamshedpur and in the coalfields of Bengal and Bihar and Orissa, was cousumed in India. The quantity of imported fertilizers was recording some increase when the catastrophic fall in agricultural prices gave it a set back. The recuperative capacity of the Indian soil is naturally high but even so it has deteriorated.

Various remedies have been suggested for solving the problem of manure. In the first place the agricultural experts are even yet not in a position to give satisfactory advice to the cultivator in regard to the use of manures; and it has yet to be determined for what conditions and for what crops artificial manures can be profitably used to stimulate crop production in the country. It is obvious that this is the first problem to solve and the Imperial Council of Agricultural Research has made a beginning in this connection. Again, it is equally obvious that the wasteful practice of using cowdung as fuel must be stopped. but the problem is by no means casy of solution and the Agricultural Commission has remarked, "Our evidence does not suggest any alternative fuel for domestic purposes in districts where wood and coal are dear."* No efforts are made by the cultivator to preserve cattle urine. Manure pits are still seldom found in Indian villages. Where they do exist, no attempts

^{*} Report, p. 83.

are made to preserve the manurial value of the contents or to safeguard the public health by covering the material with earth. The Agricultural Commission has pointed out the interesting fact that while artificial fertilisers are used as little in China as they are in India, there is no organic refuse of any kind in that country which does not find its way back to the fields as a fertiliser. Not only is human waste carefully collected and utilised, but enormous quantities of compost are manufactured from the waste of cattle, horses, swine and poultry, combined with herbage, straw and other similiar waste. Carbage and sewage are both used as manure. The Agricultural Departments are aware of these facts but they have still to devise and introduce a practical method which can be used with profit by the ordinary cultivator on his land. Prejudice against the use of night soil has deterred the cultivator in India from utilising to the best advantage a valuable source of combined nitrogen. There is, however, evidence that this projudice is weakening; Mr. Brayne's slogan of clean villages and heavy crops has been fairly successful in Gurgaon district; and where night soil is available in the form of poudrette, the prejudice is tending to disappear. The methods of converting night soil into poudrette adopted at Nasik have been highly successful and appear well worth study by other municipalities. Another indigenous source of combined nitrogen is leguminous crops and green manures. The Indian cultivator has also in many ways recognized the value of leguminous crops in his rotation, and the work before the agricultural departments is to discover the varieties of the crops best suited to increase the soil fertility, and to recommend such varieties to the cultivators. In connection with green manures, the agricultural departments have shown that sann hemp on the whole gives the best results, but the trouble with it is that it exhausts too much of the moisture in the soil. We cordially endorse the opinion of the Agricultural Commission* that, "not until the agricultural departments are in a position to demonstrate to him beyond a shadow of doubt the paying nature of

^{*} Report, p. 86.

green manure crops on small holdings, that these departments will be justified in persuading the small cultivator to adopt them or that their advocacy of them will stand any chance of success." The economics of green manure crops from the point of view of the small cultivator still require to be worked out. The possibility of growing such crops as dhanicha and groundnut, the leaves of which can be used as green manure without interfering with the commercial value of the crops, is worth consideration.

Reference has been already made to a valuable source of combined nitrogen which is lost to India as the result of the export of so large a proportion of its production of oil-seeds. But until the oil-crushing industry has been developed, and an effective demand has been created for oil-cake, coupled with great changes in cattle management and in the use of fuel, this evil cannot be easily remedied. The proposal for the establishment of synthetic processes for obtaining combined nitrogen from the air in forms suitable for use as fertilizers, has been turned down by the Agricultural Commission on the ground that only a very large scale production can be successful, and that conditions in India make it unlikely that it would prove a paying proposition. But if a definite plan for a simultaneous forward movement in both agriculture and industry is made and carried out, such a proposal must inevitably form a part of it. In the discussion of economic problems in this country, we often move in a vicious circle, as the different problems are closely interconnected, and agriculture cannot progress until industry has advanced and vice versa. But the vicious circle requires to be broken, and the solution is not an airy dismissal of a crucial proposal, but a concentrated attack on the obstacles which stand in the way of comprehensive economic planning for the country. Nitrogen deficiency can be remedied to some extent by the application of bones and bone meal; but as with other forms of combined nitrogen, an important quantity of this fertiliser is lost to India by a failure to apply it to the soil and by export. The reduction in the rates on fertilisers on state railways may help a little and a similar reduction should be made in companymanaged railways as well.

Implements. The implements used by the agriculturist are cheap and simple, easy to make, to carry and to repair; but it is not possible to get the maximum productivity from the soil by means of them. Some improved implements like iron plough and small pumping machines have come into use, but hardly a fringe of the problem has been touched. Extensive cultivation by means of agricultural machinery is ill-suited to Indian conditions, but in a few places in Gujrat, Sind, Bihar and Central Provinces, tractors are coming to be used by the bigger zemindars, and if the results obtained are satisfactory, the demand for them is bound to increase. We venture to think that the greatest scope for immediate action is provided by the improvement of the simple implements in actual use worked by hand power and bullocks. It is not an easy task to induce the poor, timid, conservative, and tradition-bound cultivator to take to the use of improved implements; and it is only by means of intensive propaganda, backed by successful demonstration, that he can be induced to make a change. This is obviously the duty of the Agricultural Departments which should seek the support of the co-operative movement and the agricultural associations. By large scale production in the country and cheap transport, a few implements, simple, standardized and effective, can be popularized throughout the country. Provision must be obviously made for spare parts and repairs, and every problem of the cultivator in this respect must be seriously tackled. Provision has been made by the Agricultural Departments for agricultural engineers to advise the wealthier landowners about the installation of machinery for irrigation etc.

Animal Husbandry. Cattle are the most important part of the live-stock of the Indian cultivator; and in no country in the world are cattle of more importance than they are in India. In a predominently vegetarian country like India, milk and milk products constitute an indispensable article of diet; but milk, though very important, is a secondary consideration. The primary function of the cattle is as draught animals for the plough or the cart. Without the ox no cultivation would be possible: without the ox no produce could be transported. The

AGRICULTURE: PROBLEMS OF LABOUR AND ORGANIZATION 160

following are the latest figures available for the different groups of livestock in British India:

			Millions.	
Cattle and buffaloes	•••			151.0
Sheep and goats		•••	•••	62.5
Horses, Mules and donkeys		•••		3.2
Camels				0.5

And in addition we get the following figure for 66 Indian States which provide statistics:

			Millions.	
Cattle and buffaloes			•••	36
Sheep and goats		•		25
Horses, Mules and donkevs		•••	T	
Camels				.26

There seems to be a general similarity in India in the methods of management by cattle owners. It seems that the total number of cattle within a district depends upon and is regulated by the demand for bullocks. And the worse the conditions for rearing efficient cattle, the greater the numbers kept tend to be; and on account of the heavy pressure on the available supply of food for the cattle, the cattle deteriorates, and cattle-breeding in this country moves in a complete vicious circle. As cattle becomes smaller, the amount of food needed in proportion to their size increases. Thus large numbers of diminutive cattle are a serious drain on a country in which the fodder supply is so scarce at certain seasons of the year as it is in India. The task of reversing the process of deterioration and of improving the livestock of this country is now a gigantic one; but on improvement in its cattle depends to a considerable degree the prosperity of its agriculture, and the task must be faced. A progressive deterioration in the quality of the cattle is to be feared unless substantial changes in the present cattle management are introduced. Three cardinal points in a policy of improvement must be a reduction in the number of

plough cattle, an increase in the efficiency of plough cattle, and an effort to secure better treatment for dry cows and cowsin-calf. The two important factors in cattle improvement are feeding and breeding, and no outstanding improvement in the way of breeding is possible till cattle can be better fed. The crux of the situation is the period of scarcity which is the twoor three months preceding the break of the south-west monsoon. Stall-feeding is little practiced in the country and facilities for grazing are the principal consideration. In nearly every part of India the common grazing lauds and all grass lands close to villages are hopelessly overstocked. It is the curtailment of uncultivated land as population has increased during the past century that is the most obvious cause of the present overstocking of village grounds. As for the extension of grazing land the Agricultural Commission opine, "After an exhaustive survey of the possibilities, we are of opinion that no large additions to existing grazing areas are possible and efforts should therefore be concentrated on increasing the productivity of land already growing grass. The scope for such efforts is very great."* It is only fair, however, to note that as opposed to the general run of inefficient and under-sized cattle, there are some few cattle belonging to a number of well-recognized breeds, such as the Hariana and Sahiwal of the Punjab, the Thar Parkar and Sindhi of Sind, the Kankrej of Gujrat, the Gir of Kathiawar, and the Ongole of Madras.

Fodder. Among the remedies that can be suggested, the growing, efficient storage and economical use of fodder crops must take the first place. Without going into details in the consideration of the problem, certain outstanding features may be briefly touched. Grazing on common land could be regulated and rotational grazing established with the consent of the majority. In hilly districts, where grazing facilities are better than in the plains, part of the area should be reserved for cutting grass for use in the hot season. Where use cannot be made of natural grazing grounds owing to lack of water,

^{&#}x27;Abridged Report, p. 21.

the possibility of obtaining a supply should be investigated. The possibilities of silage are also great, though the practice is attended by difficulties and has not been adopted by cultivators. The use of the chaffcutter, the addition of cheap meal and condiments to make straw more palatable, harvesting at the right time so as to get full value from the straw, the encouragement of the growth of fodder crops, are some of the lines for further trial and investigation. The cultivation of Egyptian clover seems to hold out great possibilities if the seed can be cheaply grown in quantity in India. Every encouragement should be given to the cultivation of leguminous crops by the remission of charges for water from government sources of irrigation or by the grant of concession rates. Another remedy for the economical use of fodder could be effected by the elimination of useless cattle. A large number of old and worn out bullocks and barren cows eke out a very precarious life. There is a strong sentiment against killing them; but there is no sentiment against slowly starving them to death, which is what actually happens. It would be kinder both to the cultivator and the animals, who are uselessly kept alive and suffer a lingering and painful death by starvation, if this weak sentimentalism makes room for a straightforward attitude which faces squarely the hard realities of the situation. But the prejudices are very strong and there is no possibility of a radical change in the near future. The elimination of the buffalo by means of dual purpose breeds may help to reduce the pressure on the available supply of fodder, but the difficulties of such breeding under existing conditions are by no means easy to surmount.

Cattle-breeding. In actual practice cattle breeding is now regarded as an accident of husbandry rather than as an essential part of it, and professional cattle-breeders are now a rarity in the country. In this connection the apathy and indifference of the big landowners constitute a serious stumbling block in the path of scientific cattle-breeding. For selective breeding and cross breeding animals need to be enclosed; and the compulsory castration of undesirable bulls is equally necessary, and the

Veterinary Department has been recently doing it by methods which do not offend the religious susceptibilities of the people. In order to achieve the improvement of cattle by careful breeding, the aim should be to establish pure and improved types of the best cattle now available; and the attempt to produce a "dual purpose" animal, suitable both for draught and for milking and gih production, may prove to be too speculative. this is granted, it follows that milking qualities should be encouraged only in so far as these are entirely consistent with the maintenance of the essential qualities which good draught cattle must possess. Although Government must be credited with having made a beginning with cattle improvement, very little progress has yet been made by government cattle farms towards meeting the total requirements for young bulls. The policy pursued in the United Provinces of limiting the issue of breeding bulls to selected districts, with a regular inspection both of the cows and their progeny and of the bulls placed out, has received the commendation of the Agricultural Commission. Improvement of indigenous breeds by selection is a safer policy to pursue than cross-breeding. Cattle-breeding problems are in the main local, and it seems natural and proper that the ordinary work of cattle-breeding should be undertaken by the provinces which should provide instruction in dairying for their own students. The production of milk for urban consumers presents problems of great complexity. The essentials for a successful scheme of urban milk supply are a tract of country in which fodder is plentiful or can be easily grown, adequate arrangements for transport, and a suitable type of cow. Municipal corporations of the larger cities should promote the establishment of large dairy farms and devise means by which capital and business ability may be attracted to large scale milk production.

Diseases of Livestock and their Control. As the working captial of the cultivator is mainly represented by his livestock, the loss of his cattle from disease presses very heavily on him. The recorded figures are admittedly imperfect, but even so they indicate beyond any doubt that the mortality among

cattle is very heavy, and rinderpest takes the largest toll. And in addition to losses by death, extensive indirect losses occur from large number of cattle temporarily incapacitated by disease. The general prevalence of contagious diseases is probably one of the most serious obstacles to the improvement of cattle, and it is also one of the main reasons why cattlebreeding in this country is a very speculative enterprise. The outstanding problem which faces the veterinary department is thus the control of contagious diseases. In this connection it is interesting to observe that while rinderpest was formerly the most dreaded of all livestock scourges in western countries, it is now non-existent. The adoption of western methods is at present impracticable on account of the inadequacy of the veterinary staff and the prohibitive cost of compensation, combined with prejudices against the destroying of healthy animals which have been in contact with infected ones. Nor is it possible to adopt the South African devise by interposing belts of protected country between permanently infected areas and areas from which the adoption of intensive measures has succeeded in eradicating the disease. The only practical proposition for the time being is to adopt measures designed to protect the individual animal rather than those which aim at stamping out the source of infection.

The method in general use at present for dealing with rinderpest is inoculation by what is known as the "serumalone" method. The defect of this method is that it confers complete immunity for less than a fortnight and the animal is liable to contract disease unless it is re-inoculated, which discredits the process in the eyes of the cultivator, besides being expensive, and when an epidemic is raging, re-inoculation is often impossible. An improved process, known as the serum simultaneous, has been devised; and, to quote the Agricultural Commission,* "The efficacy of the method has been proved in countries as far apart as Russia, South Africa and the Philippines while its success in Egypt is of particular interest

to India. In India, only one experiment on an intensive scale has so far been made in the Mysore State. Experience obtained there shows that the serum-simultaneous method is safe, effective and readily accepted by cultivators". The Agricultural Commission strongly recommends the introduction of this method, but anticipating some opposition from the cultivators, it considers that resort to compulsory inoculation would, at present, be undesirable. In order to popularize the method of inoculation, it further recommends that all charges for inoculation should be abolished. It also recommends that Contagious Diseases of Animals Act should be passed with a view to ensuring a uniform procedure in dealing with contagious diseases.

The provision of veterinary aid in India is totally inadequate and the Agricultural Commission recommends that the staff should be immediately multiplied by five to six times to make a serious beginning in tackling the problem; in addition to a central veterinary hospital, having accommodation for in-patients, in each district, there should be a number of dispensaries serving the sub-divisions of the district, and members of the staff should be sent out to tour in surrounding areas. The maladjustment of public expenditure is responsible, in no small measure, for the terrible plight of the cultivator. Veterinary research is mainly concentrated at the Imperial Institute of Veterinary Research at Muktesar. At present, however, the energies of the Research Institute are largely spent in the administrative work which the manufacture of the various sera and vaccines involves, and comparatively little is done for research pure and simple. This obviously requires to be put right. The Agricultural Commission recommends that any extension of central research should be provided for by a corresponding expansion at Muktesar and not by an unnecessary duplication elsewhere.

Agricultural Marketing. "No systematic survey of the conditions under which agricultural produce is marketed in India has yet been made in any province" and "Much of the information essential to an exhaustive study of marketing condi-

tions has never yet been collected."* Recently that Government of India has appointed a number of officers to investigate the marketing conditions of some staple agricultural products. As long as the Indian cultivator was practising subsistence husbandry and enjoying the benefit of the old village organization, he did not stand in any particular need of marketing facilities. But under the British regime the old order has given way, and the Indian cultivator was suddenly plunged into the new order, without any preparation or organization either by himself and his fellow-cultivators or by the state. As if that were not had enough, marketing was only a very subsidiary interest of the cultivator, his primary interest naturally being production; and he was pitted against dealers who were highly organized and strongly consolidated and who made marketing their principal activity. Under these circumstances it is not surprising that the interests of the cultivator, left to the free play of economic forces, have suffered in the process; and until he realizes that, as a seller of produce, he must study the art of sale, either as an individual or through combination with other producers, it is inevitable he should come off badly in his contest with the highly specialized knowledge and the vastly superior resources of those who purchase his produce. The complaint of agriculturists that they do not obtain a fair value for their produce in the market is world-wide; and while some of his handicaps are not peculiar to the Indian cultivator, others are felt by him to a much greater extent than elsewhere; and prominent among the latter are heavy indebtedness, the very poor standard of literacy, unsatisfactory communications, the absence of properly regulated markets, and the lack of combination among producers The problems of indebtedness, illiteracy and communications are dealt with in detail in different chapters; here we shall principally concern ourselves with absence of properly regulated markets and with the lack of combination among producers.

^{&#}x27;Agricultural Commission Report, p. 385.

When the primary collector of the produce, who acts also as a money-lender, succeeds in getting a cultivator into his grip, he is apt to use his advantage ruthlessly, and some of his practices amount to nothing less than common theft. Again, it is certain that there are various services of marketing and distribution performed each by a separate intermediary which, under a better organized system, might well be rendered by a single intermediary, or better still by a co-operative marketing organization, which eliminates all middlemen. Bad conditions of marketing encourage a superfluity of middlemen; and apart from the organization of producers for the sale of produce. the most effective means of removing unnecessary middlemen are the provision of good roads, and the establishment of a sufficient number of well-regulated markets, easy of access to the cultivator. For the framing of a sound and comprehensive policy for improvement in marketing, exact knowledge of the methods of distribution applicable to any particular class of produce, including collection, storage, transport, and, where it exists, manipulation, together with a detailed analysis of the price structure at every stage in the operation, is essential.

While the agricultural departments in India have done something to improve the quality and increase the quantity of the cultivator's output, it cannot be said that they have been able to give him any appreciable help in securing the best possible financial return for his improved quality and his increased output. For this comparative indifference to quality, the middlemen may in part be responsible, as he is inclined to buy rather in quantity than in quality, and it is only when an improved variety has been grown over a large concentrated area, that a reputation for quality can be obtained and a premium price commanded. In all provinces markets vary greatly in character and importance. Some are privately owned; some are directly under the control of the district board or municipality. It is only in Berar and Bombay that the constitution of markets is regulated by special legislation and the management is in the hands of elected committees. The cultivator labours under very considerable difficulties in

selling his produce in markets as at present organized. It would serve a useful purpose if the market committees should charge themselves with the duty of posting prices, ruling at the market centres of the tract and at the ports, for the products dealt with in the market. The standardization of weights and measures is another direction in which improvement is necessary. A committee was appointed by the Government of India to investigate this subject in 1913, but no action has yet been taken on its recommendations. The Agricultural Commission recommends that a fresh investigation should be undertaken with a view to standardizing weights and measures throughout the country. Much of the Indian produce exported to foreign markets would appear to be marketed in an unsatisfactory condition, though matters have improved to some extent in recent years. "In England we were informed that cotton is bailly mixed, that jute is badly retted and graded and suffers from excessive moisture, that Indian hemp is very irregular in quality, badly mixed, and contains an excessive proportion of dust and dirt. On the other hand the report on Indian oilseeds, with the exception of groundnuts which frequently suffer from excessive moisture, was satisfactory. Opinion on the quality of Indian wheat was divided."* The remedy lies in the agricultural and co-operative departments keeping in close touch with the trade requirements and helping the cultivator to get the benefit of his better cultivation and better methods of preparing the produce for the market. Organized trade associations, such as the East India Cotton Association, who are in a position to lay down grades and standards can give great assistance. The agricultural departments can further substantially assist the co-operative sales societies by grading their produce, and auctioning produce of superior quality grown under their own supervision.

An investigation into the possibilities of grain elevators does not commend itself to the Agricultural Commission on the ground that an elevator system would have to be financed by

^{*} Agricultural Commission Report (Abridged), p. 45.

Government and the advantage to the cultivator appear to be altogether too problematical. But the commission strongly emphasises the importance of the question of marketing and suggests that an expert marketing officer should be appointed to the staff of the agricultural departments in all the major provinces. One of his first duties should be to organize market surveys. As has been already observed, there is a great lack of exact information on the subject, and this must be remedied before a satisfactory scheme to assist the cultivator in his marketing operations can be worked out. The problem of warehousing, and the issue of warehousing certificates against which the co-operative and other banks could advance money to the cultivator, also require to be systematically investigated. At present opinion on their immediate utility is divided, but as licensed warehouses would enable the cultivator to hold out against a favourable turn of prices, and enable him to store his produce safely and get an advance against it, we are of opinion that it is in the interests of the cultivator that these facilities should be available to him. In this connecton the provincial governments can help considerably by giving longterm loans to co-operative societies at cheap rates to build godowns in suitable centres.

The question of co-operative marketing is discussed in the chapter on co-operation.

CHAPTER IX.

RURAL INDEBTEDNESS.

I. GENERAL SURVEY.

The Serious Problem of Rural Indebtedness. Credit is a supreme necessity for the agriculturist everywhere as his capital is generally locked up in his land and stocks and he cau realize it only at the harvest time. Rural indebtedness as such is not necessarily objectionable nor is it necessarily a sign of weakness. But the fundamental objection against rural indebtedness in this country is that the bulk of it is incurred for unproductive purposes and it is far beyond the means of the people. Mr. Darling estimates * that in the Punjab less than 5 per cent. of the debt is due to land improvement; and what is true of the Punjab is more or less true of the rest of the country. Productive debt by increasing the fertility of the land automatically provides for its own repayment, while the unproductive debt can be repaid with difficulty by the impoverished Indian peasant and has an inevitable tendency to grow. The Royal Commission on Agriculture in India stated that it is more than probable that the total rural indebtedness has been increasing; and this statement is amply supported by the various Provincial Banking Unquiry Committees. This increasing indebtedness and the heavy interest charges constitute, by common consent, one of the main causes of the destitution of the Indian agriculturist; and we can form some idea of the seriousness of the problem when we bear in mind that in the Punjab alone the annual interest charges on rural debts amount to more than Rs. 13 crores,† or nearly three times the total land revenue assessment. And the Punjab in this respect is more or less typical of the country as a whole.

^{*} M. L. Darling; Punjab Peasant in Prosperity or Debt, p. 17 to 19. † Ibid., p. 5.

The Extent of Rural Indebtedness. Various estimates of rural indebtedness in the country have been made from time to time. In 1895 Sir Fredrick Nicholson estimated the total rural debt of Madras at Rs. 45 crores, and on the basis of Nicholson's calculation, Sir Edward Maclagan calculated the total rural debt of British India to be about Rs. 300 crores in 1911. Mr. Darling took as the basis of his calculation the total rural debt of Punjab in 1924 which amounted to Rs. 90 crores. The Punjab figure was 19 times the land revenue of the province, but on the ground that the Punjab was more heavily indebted that the rest of India, he has worked out the figure for the total rural indebtedness of British India by multiplying its land revenue by 17 times. The estimate comes to about Rs. 600 crores.* The Indian Central Banking Enquiry Committee † put the total rural indebtedness of the country at about Rs. 900 crores in 1931; but the Punjab figures, which show that the rural debt has increased appreciably in recent years, may be regarded as symptomatic of what is happening throughout the country; and as the prices also have substantially fallen, the burden of the indebtedness must have grown proportionately heavier. Considering the size and the population of the country, even such a large figure need not alarm us nor is it unprecedented. But the unproductive nature of the debt and his extreme poverty make the burden much too heavy and far beyond the capacity of the Indian ryot. His indebtedness is one of the major problems of the Indian agriculturist and the bonds of debt shackle agriculture very seriously.

The Causes of Rural Indebtedness. The extreme poverty of the ryot is both a cause of his indebtedness and its effect and the origin of poverty and indebtedness is generally the same. The excessive pressure of population on the land on account of industrial backwardness and the unrestricted multiplication of numbers, the absence of any subsidiary industries

^{*} Punjab Peasant, p. 17 to 18.

[†] Report, Vol. I, p. 55.

for the agriculturist and the excessive sub-division and fragmentation of the holdings, must necessarily take precedence among the causes of rural indebtedness. 'Agriculture in India, dependent as it is on the fickle monsoon, is necessarily a precarious occupation; and as the bulk of the people depend upon agriculture, the foundation of Indian economy is unsound and must result in poverty and indebtedness which aggravate each other. The ancestral debt which is handed down from father to son, generation after generation, is another important cause of the present indebtedness. The land revenue policy of the Government, both in its heavy assessment in some places and a rigid system of collection everywhere, has made its contribution to increased indebteduess. The ill-health of the ryot, which often puts him out of action at critical times, is as much an effect as a cause; and his love of litigation, though it does contribute to his indebtedness, is but comparatively a minor cause... Greater importance must be attached to the extravagant scale of his expenditure on ceremonial occasions which is handed down by tradition irrespective of a man's capacity to afford it; and the loss of cattle due to famine or epidemics is obviously an important factor. With the firm establishment of British rule in the country, the growth of communications and the boom during the American Civil War and a little after the last world war, land values and with it the credit of the ryot have been steadily rising, except for the last few years. The moneylender was willing to lend and the ryot was willing to horrow and indebtedness increased rapidly. And last, but not the least, the heavy rate of interest and the system of compound interest constitute a major factor in the increasing indebtedness. The moneylender is a very important factor in the life of the ryot and must be studied carefully.

The Moneylender: the case against him. Probably no occupation in the country has been more vigorously abused than that of the moneylender. Mr. Darling calls him, "the evil genius of the cultivator, exploiting him when he is prosperous and enslaving him when he is poor." The money-

M. L. Darling: Punjab Peasant, p. 20.

lender, or the sahukar as he is generally called, has existed in India since times immemorial and has performed a very useful function; but with the advent of the British rule he has deteriorated very sharply. In the pre-British days the sahukar dared not defy well-regulated custom which limited compound interest to 50 per cent. for cash and 100 per cent. for grain; and as the state was indifferent to debt recovery, the banchayat was the only authority which could help the sahukar to recover his debt. With the advent of the British rule both these checks on the sahukar were effectively removed: village autononly and the force behind local public opinion were destroyed; and the establishment of civil courts, with their elaborate and complicated procedure, turned the scales heavily against the ryot and played into the hands of the sahukar. The British courts allowed interest to accumulate without any limit: and until very recently, a rigid and literal application of law resulted in the sale of mortgaged land in satisfaction of a civil decree. and became a normal feature of village economy, and not the very exceptional measure that it used to be in the pre-British regime. Land changed hands to an alarming extent from the ryot to the sahukar and the "marwari tenure" resulted in riots and uprisings. The old, customary, human relations between the sahukar and the 1yot were changed into purely legal and business relations. The old, respectable type of sahukar, who had a high code of honour, gave way through an adverse change of environment to an inferior and unscrupulous type. And the ryot's illiteracy, and his compelling need of credit on any terms available, have combined to make him an easy victim of the cunning sahukar who defrauds him in a variety of ways. Initial charges of 6 to 10 per cent. for "purse loosening" are not unknown; the rate of interest is heavy; interest is often calculated for a year even when the loan is for a shorter period; the amount entered into the bond is sometimes larger than that actually borrowed: reciepts for payments are not given at times and then payments are denied; there are instances on record of liquidated bonds not returned and used against the borrower; and the purchase and sale transactions of the rvot

with the sahukar reveal innumerable little rogueries which must have a large cumulative effect. The enforcement of any usury legislation is difficult, with the masses so illiterate and so completely under the thumb of the moneylender. Thus the decline of the panchayat, the establishment of civil courts, the substantial rise in the value of the land, and the series of famines during the last half a century, have led to the supremacy of the sahukar in the village and his domination over the ryot.

The Pathan Moneylender. A peculiarly obnoxious type of moneylender is the unscrupulous migratory usurer, the Pathan from the North West, who operates among the lower classes in backward areas, in famine tracts, and in industrial towns where the labourers are ill paid and deeply in debt. Interest charges of 150 per cent, are quite common and the rate of 300 to 360 per cent, is by no means rare. (The maximum legal rate for small loans is 48 per cent. in lingland and 42 per cent. in U. S. A.) The customers of the Pathan can seldom pay off their debts and they pay a very substantial part of their little incomes as tribute to the moneylender. The present writers have personal knowledge of a case, by no means uncommon, where a poor sweeper woman who had borrowed Rs. 40 from a Pathan owing to the illness of her husband, paid him Rs. 60 per year as interest for three years, and narrowly escaped a severe thrashing, because once she was unable to pay the monthly tribute of Rs. 5 out of her monthly wage of Rs. 10. The Pathan refuses to accept part payments of his loan and it is practically impossible for the horrower to collect, in addition to the monstrous interest, the total amount of the loan out of his tiny income. Thus the victims of the pathan have usually to pay him a permanent tribute. The recovery methods of the Pathan are particularly objectionable: he relies upon intimidation and sometimes violence for recovery of his loan, and his usual victims are afraid to make complaints. A case was heard in a court of law at Poona some years ago in which an Indian Christian had been forced to part with his

daughter to the Pathan moneylender in repayment of a debt of Rs. 8.*

The Moneylender: the case for him. While the case against the moneylender has not been under-stated, it would be wrong to conclude that the moneylender does not perform any useful function and only fattens himself at the expense of the ryot. He is the foundation of rural credit and in the financing of agricultural operations he is quite indispensable. The alternative sources of agricultural finance are comparatively negligible. The takavi loans by the Government have not been popular as the amount available is the proverbial drop in the ocean; there are innumerable restrictions and delays in giving the loans owing to the red-tape character of the administration; there are exactions by the petty officials, and above all the system of collecting the money is much too rigid. The ryot as a rule prefers to deal with the moneylender rather than to imperil his credit with him by taking a small takavi loan with all its handicaps. The only other source of credit open to the ryot is co-operative credit. We shall discuss it in detail later on, but here it is only necessary to observe that co-operation in India has hardly touched the fringe of the problem, and the co-operative credit societies supply only 2 per cent. of the annual credit requirements in Bihar and Orissa, † 5.3 per cent. in U. P.1 and from 7 to 10 per cent in Bombay.§ In several other provinces the percentage is much less. The sahukar. therefore, is undoubtedly the mainstay of agricultural credit and it is difficult to imagine how agricultural operations can be carried on without his help. It is true he charges a heavy rate of interest but the risks he runs due to the poverty, improvidence, ignorance and irregularity of the ryot are also heavy. Ouite a considerable percentage of his interest is in reality a legitimate charge of insurance against the risk of losing his

^{*} Indian Social Reformer, 8th September, 1934.

[†] Ribar and Orissa, Report of Banking Committee, Vol. I, pp. 27 and 139.

¹ United Provinces, Report of Banking Committee, Vol. I, p. 144.

[§] The Co-operative Movement in India by R. M. Hough, p. 243.

capital. The amounts he lends are often very small and the usual rate of interest would not make the transaction a business proposition. Mr. Darling is by no means a friend of the moneylender and he estimates that. "Indian moneylenders probably do not average over 15 per cent. a year on their capital."* Considering the important functions he performs and the obloquy attaching to his occupation, 15 per cent. on his capital does not appear to us as exorbitant. Although he is surrounded on all sides by improvidence, misery and helplessness, the money-lender himself is the embodiment of all the great virtues that his neighbours so sadly lack. In the pre-British regime when the panchayat functioned as an active institution, the ryof was not so helpless or ignorant, and the relations between the sahukar and the rvot were friendly and mutually helpful. It is the maladiustment in the organization of the village life brought about by the centralized policy of the present government which is the root of the trouble between the sahukar and the ryot; and in our opinion the solution of the problem lies not in breaking the moneylender+ but in restoring the old, friendly relations between 'thèm through the agency of an actively functioning panchayat. In breaking the sahukar it is not improbable that we may be breaking the ryot, as the sahukar meets some of the vital needs of the ryot and at present there is no agency to replace him. Besides supplying the credit, he is the village grain dealer and helps the rural community to tide over periods of famine and drought. The sahukar is a little oasis of thrift and capacity in a vast desert of rural improvidence and helplessness.

Official Measures Against Rural Indebtedness. Sir Edward Maclagan classified official measures against rural indebtedness under four heads: avoidance of unnecessary debts; improvement of the civil law; restrictions on land alienation; and provision and maintenance of credit. The

^{*} M. L. Darling: Rusticus Loquitur, p. 330.

[†] Darling: Punjab Peasant, p. 282. "To the Indian cultivator no freedom is possible till the power of the moneylender is broken".

avoidance of unnecessary debts can be only sought about by a sound and wide spread system of education. More than two thousand years ago Plato said that if we can solve the problem of education, education will solve all our other problems. The illiteracy of the bulk of the people must be set down as an outstanding failure of the government, and its economic consequences for the masses have been naturally very adverse. We shall next discuss the measures for the improvement of the civil Several useful alterations have been made in the Civil Procedure Code in the matter of executing decrees against agriculturists: agricultural tools and implements, the cattle necessary for tillage, and the agriculturist's house exempted from attachment or sale; the agriculturist debtor is exempted from arrest for a decree of the court, and he has been given the concession of paying his debts by instalments. The Usurious Loans Act of 1918 amended and consolidated the legislation which protected the ryot from the moneylender. Under the Act, the court hearing a suit for the recovery of debt might reopen the transaction and relieve the debtor of excessive interest, provided the transaction had been substantially unfair in the first instance, and the interest charged had been excessive. But the Royal Commission on Agriculture* stated that the act was practically a dead letter, and this opinion has been corroborated by the Whitley Labour Commission. † But the latter has made a useful and constructive suggestion. takes the stand that the money-lender who enters into contracts which he knows the debtor cannot fulfil, or at least can fulfil only by suffering severe and prolonged hardship, should not be able to look to the courts for their enforcement, beyond the surplus of the worker's income over a reasonable expenditure for the maintenance of himself and his family, or beyond a period of two or three years. The "reasonable expenditure" is to be determined by the court. The Whitley Commission's terms of reference confined it to industrial labour and it limits

^{*} Report, p. 49.

[†] Report, p 230.

the recommendation to industrial workers on wages and salaries of less than Rs. 100 per month, but the proposal merits serious consideration as to its wider adaptability.

Restrictions on Land Alienation. During the latter half of the last century land values rose very high and resulted in a great expansion of the ryot's credit which was generally misused. The consequences were that a great deal of land passed from the hands of an ignorant and unthrifty peasantry into those of the sahukar; and to begin with the government rather welcomed the change on the ground that the new owners would have sufficient resources to exploit the land efficiently. Gradually, however, the government realized that the large and rapid change in the ownership of land may have serious economic and political consequences and efforts were made to restrict the transfer of land, the Punjab Land Alienation Act of 1901 being an outstanding example. According to this act non-agricultural classes are not allowed to buy land from agricultural classes or to take it in mortgage for more than twenty years. It has successfully prevented the expropriation of the agriculturist by the moneylender; but on the other hand it is difficult for the capital, and greater intelligence and enterprise of the educated classes in urban areas to be used for improving agriculture, and this unnatural divorce is a handicap to the agriculturist himself. The agriculturist has also suffered to some extent by the inevitable contraction of his credit; and the emergence and growth of the agriculturist moneylender, to whom the restrictions of the act do not apply, has seriously minimized the advantages of the act. While the land remains in the hauds of the agricultural classes, the problem of rural indebtedness is hardly affected.

Provision and Maintenance of Credit. The provision and maintenance of credit is the fourth and last head under which official measures against rural indebtedness have been classified. The takavi loans are an old and traditional form of state help to the ryot and it was only after the Famine Commission of 1880 that the British Government realized its responsibility in this connection. Even so the takavi loans

have been estimated at only Rs. 6 crores at the beginning of the century, a mere drop in the ocean. It has been already explained that the takavi loans have never been popular on account of the rigid methods of realizing the loans and the red-tape character of the administration. As a general means of financing agriculture the system is a failure, although in respect of some famine tracts and backward areas, it has a limited use. The Encumbered Estate Acts and the Court of Ward Acts are helpful to the larger landowners in protecting them from insolvency. But the co-operative movement opens up great possibilities for the amelioration of the condition of the ryot and we shall make a detailed study of it in the next chapter.

II. RECENT LEGISLATION.

The Raison d'etre of Recent Legislation. The catastrophic fall in agricultural prices made the problem of rural indebtedness a very serious matter which demanded immediate attention. While the tiny income of the agriculturist had been substantially reduced, the land revenue, rent and interest charges remained at the old level, and the situation was steadily heading towards a catastrophe. Under the circumstances some drastic remedies were urgently needed, and legislation has been undertaken in some of the provinces to meet the situation thus created. We shall study in some detail the legislative measures that have been passed in the Central Provinces, the Punjab and the United Provinces.

Debt Conciliation in the Central Provinces. The Debt Conciliation Act of 1933 in the Central Provinces is a bold measure and it is interesting to study how it works in actual practice. In this connection it is necessary to familiarize one-self with the provincial background the main features of which are that nearly 90 per cent. of the tenancy land and 70 per cent. of all cultivated land, is held by occupancy tenants; it is not transferable except to co-sharers and certain heirs; it cannot be used as security for loans, although takavi advances form a charge on it; and it cannot be attached or sold in execution

of decrees, but for arrears of rent the tenant may be ejected by a revenue court. The result is that the credit of the agriculturist is limited, the rate of interest is high, and the secured debt in 1928 amounted to only 27 per cent. The present debt conciliation legislation had a local precedent during the economic depression which resulted from the great famine of 1897-1900, when Government carried out a scheme of debt conciliation to the extent of Rs. 240 lakhs of which Rs. 155 lakhs. which was mostly irrecoverable, was remitted. The present measure came into force from 1st April 1933. The machinery for its working is the Conciliation Board which consists of a chairman, who is an executive or judicial officer, and a few non-official members working in an honorary capacity. The procedure of debt conciliation is that creditors or debtors, who do not owe more than Rs. 25,000, may apply to the Board giving particulars about the parties, the amounts owed to each creditor, the property owned by the debtor and so forth. The Board examines the applicant and if it is satisfied about the desirability of a settlement, a notice is issued to all the creditors to submit an account of the debt owed to them. If a statement of debt is not made in time, such debts are deemed to have been discharged; and the creditor must also submit his books and documents for inspection. The Board then endeayours to make an amicable settlement; and if the creditors to whom 40 per cent, of the debts are owing agree to a settlement, an agreement is signed setting forth the terms, and it is registered under the Indian Registration Act. Lawyers are debarred from appearing before the Board and they have no place in the conciliation system. If a debtor defaults in paying the instalments according to the agreement, such amount may be recovered as arrears of land revenue on the application of the creditor, but if the Deputy Commissioner fails to recover such arrears, he will certify that it is irrecoverable, and the agreement will cease to subsist. If a creditor refuses to agree to an amicable settlement, the Board grants the debtor a certificate in respect of the debts owed by him, and if the creditor sues the debtor in a civil court for the recovery of the same, the

court will not allow him any costs in the suit, or interest on the loan exceeding 6 per cent. after the date of certificate. After the registration of an agreement, if an unsecured creditor sues for the recovery of the debt, any decree so obtained will not be executed until all amounts payable under the agreement have been paid off. Civil courts are prohibited from entertaining suits in any matter pending before a Board, and proceedings pending before a court are suspended, and cannot be revived until the Board has disposed of the application.

There was at first a sharp conflict of opinion about the inclusion of co-operative debts in the scope of debt conciliation. The non-officials were opposed to it as they feared that the inclusion would ruin the co-operative movement by causing a run on the central banks. On the other hand the Registrar of Co-operative Societies was in favour of inclusion on the following grounds: conciliation must comprise the entire debt if it is to be effective; the exclusion of co-operative debt would cause a grievance to private creditors; the conciliation of co-operative debt would stimulate the process, already initiated, of writing off bad debts, and if co-operative debt was not included, the debt owed to private creditors would become like a first charge on the ryot's annual income. In the end it was decided to include co-operative debts, subject to the previous approval of the Registrar.

The Working of the Conciliation Boards. The work done by the various conciliation Boards till October 1934 has been summarized by Dr. P. J. Thomas* as follows: the number of agreements executed has been 4,273; the amount involved has been Rs. 42.83 laklis; the number of certificates issued has been 1,112; and the percentage of remission has ranged between 30 and 54. The economic advantage resulting from such debt settlements is very substantial as there is a great saving in time and money to all the parties concerned. However, what the parties gain is at the expense of the lawyers and the Government treasury: the lawyers have much less work,

^{*} Madras University Journal, Jan., 1935.

and in Seoni the number of cases has already diminished by a third; and Government loses both under court fees and incometax. The impression created by the working of a conciliatory board is thus described by Dr. Thomas:*

I visited Sconi in the middle of Scotember 1934, and was much impressed by the working of the Conciliation Roard, by the espite d'corps animating the members of the Board, the conciliatory spirit of the moneylenders, and above all, the fairness and ability of the chairman. In fact, the chairman is the life of these Boards, and their success is greatly due to his industry and perseverance.

Dr. Thomas is a fortunate man who seems to have discovered an ideal spot where conflicting interests harmonize as a matter of course, but nevertheless the system has some serious deficiencies which he has himself pointed out. In the case of secured creditors, who can realize their debts by proceeding to the civil court, very few have entered into any agreements. And even after an agreement has been arrived at, the secured creditor, who is not a party to it, can proceed to foreclosure and thus nullify the agreement. And the unsecured creditors who enter into an agreement generally do so because they find it impossible to realize their debts. The unequal treatment of secured and unsecured debts is not in keeping with the Indian traditional law; and it is calculated to undermine the sanctity of the plighted word. Again, the conciliation Act can only relieve a small section of those who need relief, and even they get only a partial relief. The granting of a certificate by the Board does not help the debtor or hurt the creditor very much, as it only means that the creditor will not get the costs of the suit, and interest will not exceed 6 per cent. after the date of certificate. Opinion is gathering in favour of removing the advantages given to secured creditors; and, in order to facilitate agreements, the minimum limit of acceptance by the creditors to whom a certain amount of the debt is due should be reduced from 40 per cent, to 20 per cent. Another complicated issue is whether arrears of rent should be excluded from the purview of the Act. On one

^{*} Madras University Journal, Jan., 1935.

side it is argued that as the malguzar pays the land revenue out of the rent he receives, it would be unfair to cut down the rent. For the other side it is pointed out that the arrears of rent are in reality arrears of loans advanced by the malguzars to the tenants; and if rent is excluded by statute from the operation of the Act, a good number of cases that now come for settlement will have to be dismissed, and the Debt Conciliation Act will be of little real help in relieving agricultural distress.

The acid test of the success of the Debt Conciliation Act is the punctuality with which the instalments under the new agreements are paid; for if the instalments are not forthcoming. the agreements will be null and void. And however light the instalments, the cultivator finds it difficult to pay them. It is proposed that Land Mortgage Banks should be started to provide the ryot with long term credit; and as the bulk of land is non-transferable, Government is proposing to change the land law, enabling occupancy tenants to mortgage and sell their holdings to the land mortgage banks. The crux of the matter is that until the profits of agriculture can be substantially increased, the problem of the ryot's indebtedness cannot be solved; and the actual result of Debt Conciliation Act is that a part of the debt is remitted, and the remaining portion must be financed by land mortgage banks. He will be a hold man who will prophesy that the land mortgage banks can easily realize their debts: the experience of the Punjab is quite the contrary. The net result of the Debt Conciliation Act will be that debts will be partly cancelled and partly transferred, but they cannot be liquidated. At its best it will be a palliative and not a cure.

The Government of the Central Provinces has also carried out legislation to regulate money lending and to keep interest rates under control. The Usurious Loans Act of 1918, which has proved in practice to be a dead letter, gave the courts power to reopen transactions and cut down interest if the rate of interest was excessive and the transaction substantially unfair. The Usurious Loan (Central Provinces Amendment) Act of 1934 not only empowers the courts but compels them to interfere if the rate of interest is excessive or the transaction

is substantially unfair; both these conditions need not be fulfilled. While it is left to the discretion of the court to decide what is excessive interest, it will be deemed excessive if it exceeds 12 per cent. on secured loans and 18 per cent. on unsecured. The Moneylenders' Act of 1934 is meant for the control of money lending and provisions have been made for the maintenance of accounts by moneylenders and for the supply of statements thereof to debtors. The principle of dandulat is recognized: interest in future is not to exceed the principle. This may apply to past loans also, with certain reservations; and decretal amounts may be paid by instalments.

The Punjab Relief of Indebtedness Act. The Punjab Relief of Indebtedness Act passed at the beginning of 1935 has aroused a great deal of fierce controversy, as in addition to the clash of economic interests between the creditor and the debtor, there is the bitter communal conflict between the Hindu who is generally the creditor, and the Muslim who is generally the debtor. The Punjab legislation has followed closely the Central Provinces legislation. The amendment of the Usurious Loans Act of 1918 in both the provinces is more or less identical: the courts are not only empowered but compelled to reopen transactions if the rate of interest is excessive or the transaction is substantially unfair; both these conditions need not be fulfilled as in the original act. The definition of excessive interest in both the provinces is identical: on secured loans if it exceeds 12 per cent, simple interest, and on unsecured loans if it exceeds 18 per cent, simple interest. The Debt Conciliation Boards established under the new act are obviously modelled on the Central Provinces Boards; and except that lawyers are allowed to appear before the Boards in the Punjab, there is no appreciable difference. The principle of damdupat, that interest is not to exceed the principle, is equally recognized in both the provinces. It is rather curious that more or less identical legislation was passed in the Central Provinces without any noticeable friction, while in the Punjab it has roused a bitter conflict which is hardly ended. A part of the explanation seems to be that the bill as originally passed by the Punjal

Legislative Council, under the stimulus of class and communal interests, was drastic, and defined interest to be excessive if on secured loans it exceeded the bank rate plus 2 per cent. interest; and on unsecured loan if it exceeded the bank rate plus 5 per cent. interest. Apart from the low rate of interest allowed, most of the creditors or the debtors do not know what is the bank rate, and such a measure would be obviously oppressive, and break down in practice. The Governor returned the bill with a schedule of amendments; and the bill as it finally passed the Puniab Legislative Council is more or less identical with the legislation in the Central Provinces. But there is one important difference: no provision is made in the Punjab legislation for recovery of debt, and the debtor is entrenched behind the land alienation act. Credit in the village economy is getting frozen and the recent legislation will have a tendency to accentuate it. On the other hand, at least a part of the debt is quite irrecoverable, and any debt legislation must necessarily take that into full consideration.

The United Provinces Acts, 1934. During 1934 the United Provinces made a serious effort to tackle the problem of rural indebtedness and five legislative measures were passed accordingly. These comprise the Agriculturists' Relief Act, the Encumbered Estates Act, the Regulation of Sales Act, the Temporary Regulation of Execution Act and the Usurious Loans Act as amended by the U. P. Usurious Loans Act. Their object evidently is, in view of the catastrophic fall in agricultural prices, to relieve the agriculturist of a considerable portion of the crushing burden of his debt at the expense of his creditor, And it must be conceded that under any circumstances the creditor could not have realized his dues in full. How far the burden of the agriculturist will be relieved remains to be seen and it is premature to form any opinion about the working of these Acts at this stage. We shall briefly consider each of these measures.

The Agriculturists' Relief Act. The principle provisions of this act are that a decree against an agriculturist shall be paid

in a number of instalments which shall not extend beyond four years in the case of mortgagee agriculturists, and beyond fifteen years in the case of other agriculturists, and the period can be further extended on account of an agricultural calamity. On the other hand if a certain number of instalments are in arrears, the decree-holder may immediately enforce payment of the whole amount then remaining due. Future interest on the decree against an agriculturist shall not exceed the rate notified by the Local Covernment. In order to prevent the transfer of property from the agriculturist to his creditor, it has been provided that no mortgage of land by an agriculturist made after the commencement of this act shall be valid, if possession of the mortgaged land is to be delivered to the mortgagee; unless the mortgagee is authorized to retain such possession and to receive the rents and profits in lieu of interest and towards payment of the principal, on condition that after the expiry of a fixed term not exceeding twenty years, the mortgaged land shall be re-delivered to the mortgagor and the mortgagedebt shall be deemed to have been discharged. It is further provided that no loan taken by an agriculturist after this act comes into force shall bear interest at a rate higher than that notified by the Local Government It is the duty of the creditor to maintain and furnish accounts; any creditor, recording in his book of accounts as lent to the agriculturist a sum larger than that actually lent, is liable to a fine of rupees one hundred for the first offence, and a fine of rupees five hundred for any subsequent offence; and in case of failure to give credit to the agriculturist for any payment made by him to the creditor, the court may award the debtor such compensation as it considers necessary, not exceeding double the amount of payment made by him. Except as otherwise provided for by this act, no order passed by the Local Government or the Collector under the act shall be called in question in a civil court.

The Encumbered Estates Aci. The Act is intended to assist landowners whose estates, it relief is given, are sufficient to discharge the liabilities. It applies only to larger landlords whose land revenue, actual or nominal, is more than Rs. 100

and only to such of them as ask to have the Act applied to their estates, within one year after the date on which it comes into force. If the landlord puts in an application, a Special Judge appointed for the purpose will enquire into the landlord's debts, and if the contractual rate of interest on the loan taken is high, will reduce the amount due in accordance with the principles stated in the Act. When the Special Judge entertains an application, all proceedings pending at that time in any civil or revenue court in the United Provinces against the landlord shall be stayed, all attachment and other execution processes shall become null and void, and no fresh suit or other proceeding can be instituted. On the other hand, the landlord shall not be competent, without the sanction of the Collector, to make any exchange or gift or to sell, mortgage or lease his proprietary rights or any portion of them. The Special Judge shall examine all claims against the landlord and determine the amount of his debts, provided that the amount of interest shall not exceed the principal, the provisions of the Usurious Loan Act of 1018 will be applicable to the proceedings, and the provisions of the United Provinces Agriculturists Relief Act of 1034 shall not be applicable to proceedings under this Act. For purposes of liquidation landed property will have two values—a transfer value and an instalment value. The transfer value is practically what the value of land would have been but for the remissions for the slump in prices. The instalment value is based on the post-slump profits, as it is the amount which can be collected with interest from those profits over a period of twenty years. Where debts do not exceed instalment value or proprietary rights in land, the debtor shall be ordered to pay such amount to the Local Government in instalments, with future interest which shall not be higher than 41/4 per cent. per annum, provided that such instalments shall not extend beyond a period of twenty years. Where debts exceed instalment value of proprietary rights in land, the debtor shall transfer to the creditors entire proprietary rights in unprotected land; and the balance will be recoverable in instalments, which shall not extend beyond a period of twenty years, from his proprietary

rights in protected land, if any. The instalments shall be paid by the debtor to the Local Government along with his land revenue and cesses, and any such instalment not paid on due date shall be recoverable as an arrear of land revenue. An appeal against any decision, decree or order of a Special Judge of the first grade under this Act shall lie to the High Court or the Chief Court as the case may be. The period of limitation for appeals shall be ninety days.

Regulation of Sales Act. The object of the Act is to make temporary provision for the regulation of sale of agricultural land owing to the slump in prices. When agricultural land is sought to be sold in execution of a civil court decree against an agriculturist in respect of a loan prior to the passing of this Act, the Collector shall, unless the court grants instalments, determine the value of such agricultural land on the basis of the net profits, ignoring the remissions in rent and revenue due to the slump in prices, and other remissions, if any. The decision of the Collector in this connection shall be appealable to the Board of Revenue within sixty days of such decision, and the decision of the Board of Revenue shall be final. When the value of the land has been thus determined, the Collector shall give the decree-holder three options: taking the agricultural land, or the amount of agricultural land so determined, as the case may be; having the sale postponed till 1st November 1036, or any later period as may be determined by the Local Government; or having the decree realized by sale of agricultural land. If the decree-holder exercises the third option, whatever the proceeds of the sale may be, it shall be assumed that they are equivalent to the value of the land as determined by the Collector, and the decree shall be satisfied accordingly. To sum up, the agricultural land is given by law a pre-slump value in the post-slump period, and the difference is to be made good by the creditor of the agriculturist.

Temporary Regulation of Execution Act. The object of the Act is to make temporary provision for the regulation of execution of civil court decrees for the debts of small agriculturists passed before the commencement of this Act. This

Act shall not apply to any decree passed in favour of a duly registered co-operative credit society. The maximum amount of decree to which this Act applies is Rs. 1,000 and shall be determined from time to time by the Local Government by notification in the Gazette. Any person against whom a decree to which this Act applies has been passed, or his successor or representative, may, within a period of one year following the commencement of this Act, apply to the court to give him the benefit of the provisions of this Act. Any person making such an application shall pay into court to the credit of the decree-holder a sum equivalent to 25 per cent. of the amount due under the decree; and if payment is not made, the application shall be rejected. But if the applicant makes the necessary payment, and he is entitled to the benefit of this Act, all proceedings then pending for the execution of the decree shall be stayed, and the debtor shall pay the balance into court by annual instalments to be fixed by the court, subject to the following important provisions: (a) If the rate of interest at which the debt was incurred exceeds 24 per cent. per annum, the total of the instalments shall not exceed 40 per cent. of the amount due under the decree. (b) If the rate of interest at which the debt was incurred is equal to or is less than 24 per cent., the total of the instalments shall not exceed 50 per cent. of the amount due under the decree, (c) The number of instalments shall not exceed five. (d) No interest shall be chargeable on the instalments. If two instalments are in arrears, the decreeholder may proceed to execute the decree for the balance that would have been outstanding, had no proceedings been taken under this Act. No person who has made an application under the United Provinces Encumbered Estates Act shall be entitled to make an application under this Act. An income-tax assessee shall not be deemed to be a cultivator.

Usurious Loan (United Provinces) Amendment Act of 1934. The object of the Act is to give additional powers to courts to deal with cases about usurious loans. According to this Act the court is entitled to reopen the transaction if the interest is excessive or (in the Usurious Loans Act of 1918)

the word used is and) the transaction is substantially unfair. This amendment obviously increases the powers of the court. The crucial point is what is excessive interest according to this Act on secured and unsecured loans. The law does not specify it categorically, but it does specify a lower limit below which the courts cannot interfere, and an upper limit beyond which the courts must interfere. The lower limit on secured loans is 7 per cent. and the upper limit is 12 per cent.; the lower limit on unsecured loans is 9 per cent. and the upper limit is 24 per cent. It depends upon the circumstances of each case and the discretion of the court to decide what should be the rate of interest in any particular case between the upper and the lower limits.

CHAPTER X.

THE CO-OPERATIVE MOVEMENT IN INDIA.

The Aims and Objects of Co-operation. Co-operation may be defined as a voluntary association in a joint undertaking for mutual benefit. It strikes a happy mean between extreme individualism on one side and communism on the other. It has been justly described as the most difficult and beautiful art in the world, and like every art it requires a balanced combination of vision and technique. The technique of organization and operating methods is very important, but the vision is still more important; for great as is the economic end in view, the moral effort and the progressively developing sense of moral obligation are greater still. By means of association with others, moral development and mutual support, the powerless individual can obtain, in his own degree, the material advantages available to wealthy and powerful persons, and he has an opportunity to develop himself. In its technical sense Co-operation means the abandonment of competition in production and distribution and the elimination of middlemen of all kinds. The essential factors in the movement are voluntary association, joint undertaking, mutual benefit and moral development. It is, in the words of Sir Horace Plunkett, "Self-help made effective by organization." The development of the Cooperative movement in the world may be measured from the fact that the Fourteenth International Co-operative Congress held in London in 1934 represented 95,000 societies with an aggregate membership of over 100 millions and with a trade turnover of £4260 millions.* Curiously enough nearly threefourths of the co-operators represented hailed from Russia.

Co-operation in Other Countries. Co-operation there has always been in the world or there would have been little human progress; but for the beginnings of modern co-operation as a

Economist 8th September, 1934.

formal movement we have to go back to the first half of the last century. Its philosophy was expounded by Robert Owen who has been acclaimed as the father of the co-operative movement, though he was hardly concious of the important part which he was playing in the inaugeration of the new movement, and was unwilling to assume any parental responsibility for it. In England the outstanding success of the movement has been the Co-operative Consumers' Societies. The "Equitable Pioneers of Rochdale," with their sound principle of one man, one vote, their sale at market prices, and division of profits among the shareholders on the basis of the extent of their patronage, launched their venture in 1844 and made a spectacular success of it. It has become the model not only in England but also in other countries. In Denmark, as in the United States of America, co-operative marketing has been the chief development. Co-operative insurance societies are popular in France and Belgium, and co-operative land consolidation has been important in Scandinavia. But from the Indian point of view the most significant development of the co-opertive movement has been the scheme of co-operative finance which originated in Germany. Raiffeisen and Schulze-Delitzsch were the two German pioneers; and while the former's activities were chiefly for poor peasants, the latter interested himself in artisans and small tradesmen. The principle features of the Raiffeisen Societies were joint and unlimited liability, a closely restricted area, gratuitous service on the managing committee, allocation of net profits to an indivisible reserve, limitation of loans to members, and reliance on personal rather than real credit. For our purposes Raiffeisen Societies are the most important and Sir Frederick Nicholson summed up his conclusions on the problem of rural indebtedness in India in two words: "Find Raiffeisen."

Co-operation in India and the State. No consideration of the co-operative movement in India can lose sight of the Government leading-strings. In some other countries too the original impetus to co-operation came from the Government, but there is no parallel for dependence upon official initiative, direction and control that exists in India. The Registrar of

Co-operative Societies has been justly described as their Brahma, Vishnu and Shiva rolled into one, and in his evidence before the Royal Commission on Agriculture, Sir Horace Plunkett said that the Indian co-operative movement would more accurately be called a co-operative policy. He rightly added that the distinction between co-operation imposed by the Government and necessarily supervised, regulated, restricted and controlled on the one hand, and co-operation promoted by voluntary initiative and sustained by the co-operative spirit, which ensures the loyalty of the members, on the other hand, cannot be overemphasized. While the co-operative movement as we find it in the country to-day is imported from outside under official auspices, the spirit of co-operation and inter-dependence is the very keynote of our chracteristic social institutions like the joint family, the caste system and the traditional village organization. And the spirit of brotherhood is the outstanding feature of Islam. Various types of indigenous co-operation are still found in the country, the nidhis, or mutual loan associations, being the most important. The movement in connection with nidhis started in Madras and spread to the United Provinces, the Punjab and Bengal. In spite of various handicaps, in 1901 there were over 200 nidhis with some 36,000 members and a subscribed capital of more than two crores of rupees.

The Co-operative Credit Societies Act of 1904. The idea of starting co-operative societies in India was first suggested by Sir Fredrick Nicholson in his famous report published in 1805-7 on the advisability of starting a system of agricultural or land banks in the Madras Presidency. In 1899 the Madras Government reviewed it and shelved the whole question by declaring that rural credit was not an urgent problem. In 1900 Mr. H. Duparnex published a book on "People's Banks for Northern India" based on successful experiments with village banks in the United Provinces. Following two terrible famines, the Famine Commission of 1901 (of which Sir Fredrick Nicholson was a member) gave a further stimulus to co-operation by strongly recommending the Raiffeisen type of village banks. After another committee and a good deal of further

discussion the Co-operative Credit Societies Act of 1904 was passed. It was modelled largely on the English Friendly Societies Act, but was quite simple and elastic, leaving a wide discretion to the provincial Registrars to be appointed under it in building up their own co-operative structure. The act provided for the formation of credit societies only and special emphasis was laid on rural rather than urban credit. The chief provisions of the act were as follows:

- That any ten persons living in the same village or town, or belonging to the same class or caste, might be registered as a Co-operative Society for the encouragement of thrift and self-help among the members.
- 2. The main objects of a Society were to raise funds by deposits from members and loans from non-members, Government and other Co-operative Societies, and to distribute the money thus obtained in loans to members or, with the special permission of the Registrar, to other Co-operative Credit Societies.
- The accounts of every Society were to be audited by the Registrar or by a member of his staff free of charge.
- Rural societies were to have four-fifths of their members agriculturists; urban, four-fifths non-agriculturists.
- The liability of members of a rural society was to be unlimited, except with special sanction by the Local Government. Liability of urban society members might be either limited or unlimited.
- A rural society was to carry all its profits to the reserve fund, although a bonus might be distributed to the members when the reserve fund had grown beyond certain limits fixed under the bylaws.
- In urban societies no dividend was payable until onequarter of the profits in a given year was carried to the reserve fund.

- 8. Loans could be made only to members, and usually only on personal or real security but not ordinarily on chattel security, although ornaments, the common form of savings of many peasants, might legally be accepted as security.
- The interest of any one member in the society's share capital was strictly limited.
- Societies formed under the Act were exempt from fees payable under the Stamp, Registration and Income Tax Acts.
- 11. The organization and control of Co-operative Credit Societies in each province were put under the charge of a special Government officer called the Registrar of Co-operative Societies.

The Co-operative Societies Act of 1912. The working of the Act of 1904 soon revealed some obvious defects: it gave no legislative protection to non-credit societies or to the Unions, Central Banks and Provincial Banks which were gradually coming into existence to finance and supervise the primary credit societies. The Co-operative Societies Act of 1012 remedied these defects, and some minor changes were also made. Any registered society could, with the Registrar's sanction. after carrying one-fourth of the annual net profits to a reserve fund, contribute upto 10 per cent, of the remaining net profits to a wide range of charitable purposes. The shares or interest in co-operative societies were exempt from attachment and the societies were given a prior claim to enforce recovery of certain dues. The new act replaced the earlier distinction between rural and urban societies by a more logical one between societies with a limited and an unlimited liability,

Other Landmarks in the Co-operative Movement. In 1914 the Maclagan Committee on Co-operation was appointed and its report in 1915 led to the reorganization and overhauling of the whole administration of co-operation. From this time onwards the share of the non-officials in the movement had a tendency to increase, and the Co-operative Institutes started in various provinces for propaganda and co-operative education

are run under non-official auspices. According to the Government of India Act of 1919 Co-operation is a transferred subject. but so far only Bombay, Burma, and Madras have passed their own Co-operative Acts. The Bombay Co-operative Societies Act of 1925 widens the scope of the movement to "better living, better business and better methods of production." and the intended beneficiaries of co-operation are changed in the preamble from, "agriculturists, artisans and persons of limited means" into "agriculturists and other persons with common Its classification of societies is more economic needs." scientific and it makes definite provision for the arbitration of disputes and improves the procedure for liquidation and recovery. It also provides penalties for specified offences. Co-operative Committees of Enquiry were instituted in various provinces from 1922 onwards to enquire into the financial situation which was worsening and the defaults in repayment which were becoming increasingly common. In 1928 the Royal Commission on Agriculture was appointed and co-operation formed only a part, though an important one, of its extensive enquiry. The Whitley Labour Commission has dealt with the problem of credit as it affects industrial labour. Recently, in consequence of the appointment of the provincial committees under the Indian Central Banking Enquiry Committee, the co-operative movement in the different provinces, particularly the credit needs of the people and the development of banking, has been surveyed; and various provincial enquiries on a comprehensive basis have also taken place. The growing difficulties of the co-operative movement led the Government of India to hold an All-India Co-operative Conference at Delhi in January 1934 consisting of Ministers in charge of co-operation, Registrars and two representative non-officials. It emphasized the importance of the development of land mortgage banks under Government auspices and a Central Co-operative Board to co-ordinate co-operative activities in the country and to serve as a clearing house for authentic information.

Co-operative Credit. Credit societies were the earliest co-operative undertakings launched in this country and they

still dominate the picture and at the end of 1931-32 represented 83.4 per cent. of the primary societies. Among the credit societies, agricultural credit societies far exceed, both in number of societies and in membership, all other types of co-operative organizations put together. The agricultural credit society is the foundation stone on which the whole co-operative edifice is built; and the soundness of the co-operative movement is to be finally judged by the soundness of the agricultural credit society. If the latter is unsound, nothing can prevent the ultimate collapse of the edifice, however good parts of the superstructure may be.

Primary Agricultural Societies. The total number of primary agricultural societies during 1931-32 was 93,598 with a total membership of 3,109,383. The minimum initial membership permitted for such a society is 10 but the general average for the country in 1912-13 was 41 and 1931-32 it was 33. The Maclagan Committee felt that large societies are to be deprecated as the co-operative safeguards of mutual watchfulness and supervision are absent. The members must reside in the same village or must belong to the same tribe, class, caste or occupation. Mixed societies, where tried, have not been a success. With unlimited liability, which is the rule for primary agricultural credit societies, the necessity for a compact membership is urgent, in order that members may be able to evaluate each other's credit and to keep track of the employment of funds obtained through the society. The predominence of peasant proprietors or tenants in the membership varies with the conditions of land tenure prevailing in different parts of the There are few women members and it has been suggested by the Horace Plunkett Foundation that the rallying of women to the cause of co-operation may prove to be of as great importance to this movement as it has been to the popular political movement. The management is democratic and honorary and is entrusted to a general committee consisting of all the members, and a managing committee which forms the executive. In a well-conducted society the members restrict quite narrowly their actual liability, not only by careful selection of members, but by fixing at the members' meeting the maximum sum which the society may borrow from outsiders, as well as the maximum credit to each member. The tendency to be exclusive in recruiting new members, and to make societies close preserves after they are functioning successfully, constitutes a failure to pass the ultimate test of genuine co-operation.

The Working Capital. The working capital of the primary agricultural societies is Rs. 35 crores and direct state aid has represented a steadily declining percentage of total capital and is now an insignificant element in the total. The chief source of the working capital is loans from other societies, including the central and provincial banks. The financial position as on 30th June 1932 stood thus:

 Share Capital
 ...
 4,38,98,000

 Reserve Fund
 ...
 7,20,08,000

 Deposits
 ...
 3,22,81,000

 Loans
 ...
 20,03,35,000

 Total Working Capital
 ...
 35,09,25,000

Theoretically, dependence on central financing institutions is less desirable than the raising of funds locally, at least as a permanent arrangement. The late Mr. Henry Wolff said that a society in debt to a central bank should be regarded as a society "in hospital." He believed that the joint-stock banks would perform the central bank's functions more inexorably and that the societies would profit by the greater strictness. The percentage of funds raised locally is much too small in India but with the crushing poverty of the masses it would be idle to expect otherwise. Share capital is becoming quite common and an increasing important source of working capital; and the reserve fund of over Rs. 7 crores is a very satisfactory item in the working capital. The low percentage of deposits by non-members indicates that the primary agricultural societies do not command much local confidence, though we must also bear in mind the general poverty and the absence of any banking habits.

The Object of Loans. Sufficient data for the country as a whole is not available to determine the purposes for which loans are taken from co-operative societies, but a few provinces have published the results of their analyses. There are three principle objects for which loans are taken: productive purposes, debt redemption and unproductive purposes. Madras, productive loans in 1929-30 represented 69'9% of the total loans of agricultural societies and the corresponding figure for C. P. and Berar in 1928-29 was 61'4. Debt redemption accounted for 31% in the Punjab, 27.5% in Madras and 25% in C. P. and Berar; while unproductive loans accounted for 13.6% in C. P. and Berar, 16% in U. P. and 12.7% in Mysore. The ostensible purpose for which loans are sought is not always the real purpose and the benami loan, in which an obliging friend borrows in his own name for somebody else, is not unknown. A serious defect in the working of the cooperative movement has been the failure to make a clear distinction between short and long-term loans, and only recently is adequate distinction coming to be made.

Interest. Management and Audit. The rate of interest. paid by the members of the co-operative societies varies from 91/8 % in Bombay and Madras to 121/2 in the Punjab and 15% in most other major provinces. These rates are well below those of the mahajans operating in the same territory; and moderately high rates are considered desirable, not only to discourage reckless borrowing and borrowing for re-loaning by members, but to provide for bad and doubtful debts, to cover management expenses, and to build up a reserve fund. But consistently with these factors, the rates charged should be the lowest possible, as the slightest avoidable burden is an unmitigated calamity for the ryot. The cost of management, which is calculated to be 1'1 per cent. of the total working capital in 1929-30, is not excessive; and notwithstanding great temptations and opportunities for committing fraud, there has been very little misappropriation of funds. We venture to endorse the view of the Second All-India Co-operative Institutes Conference and of the Conference of Registrars in 1928, in favour of

free audit by the Government for primary agricultural societies, notwithstanding the opinion of the Royal Commission on Agriculture to the contrary. Some provinces like Madras maintain free audit; in others like Bombay it is practically abolished; but the Bengal Government has the unique distinction of making a profit of over a lakh of rupees out of audit fees.

Overdues of Primary Agricultural Societies. The acid test of the working of co-operative credit is the percentage of overdues. Insistence on payment of loans when due is vitally important, unless some obviously compelling reason like crop failure justifies an extension. The Maclagan Committee observed that unless loans are repaid punctually co-operation is both financially and educationally an illusion. Book adjustments which show that a loan has been paid and a fresh loan taken, without any corresponding transactions taking place, have been the bane of the movement in more than one province; and even where money actually changes hands, a short-time accommodation by an obliging money-lender may be the explanation. The agriculturist does not usually require any loan at the harvest season when repayment is normally made: and loans made immediately or very shortly after repayment of old loans should properly be objects of suspicion. We are, therefore, of opinion that the actual overdues are considerably higher than the figures indicate. It is a very disquieting feature of the situation that both the percentage of overdues and the amount overdue per member are steadily rising; and the figures for overdue loans are mounting up high enough to cause very serious anxiety. The overdues in 1931-32 were 40 per cent of the loans.* With the catastrophic fall in agricultural prices the overdues have increased alarmingly and since June 1932 the very serious position revealed above has grown still more serious. The Registrar in the United Provinces† makes the gloomy prediction that a great part of the loans

^{*} The percentage of overdues was 47 in 1932-33 and 32 in 1930-31.

[†] Annual Report on Co-operative Societies 1929-30, p. 2 quoted in The Co-operative Movement in India by E. M. Hough.

advanced will prove to be irrecoverable. He is further of opinion that in a few years overdues will have increased by leaps and bounds, a large number of societies will become bankrupt and go into liquidation, involving more than one cooperative bank in ruin. The trend of events seems to confirm his predictions and the very existence of the co-operative movement in the country is seriously endangered.

Primary Non-Agricultural Societies. While rural credit has rightly occupied the centre of the picture, the need of cooperative credit among the employee and labouring classes, the artisans and the small traders has not been overlooked. 1931-32 there were 5262 primary urban credit societies compared with 5491 urban societies of all other types. The urban societies had an average membership of 103 and a total working capital of about Rs. 15 crores. In Bombay, which is specially promineut in urban co-operation, urban societies with a working capital in excess of Rs. 50,000 are called urban banks. Their chief business is short-term credit, long-term credit being generally recognized as outside their scope. The urban societies in general are on the Schulze-Delitzsch model, with the working capital derived chiefly from deposits and share capital, and with limited liability. The general lines of working are similar to those of agricultural societies with unlimited liability, except that profits may be divided after the required 25 per cent. is set aside as a contribution to the reserve, workers are more generally paid, and current accounts are a common feature of the people's bank. There are too many small, poorly managed urban societies which hurt the standing of the movement; and the question of a competent staff is a vital issue. Deposits from members represented 27.7 per cent. of the working capital and those from non-members accounted for 22 per cent. This compares very favourably with 5.2 and 4 per cent. respectively which are the figures for rural societies. The average deposit per member has grown from Rs. 34.7 in 1912-13 to Rs. 39.4 in 1929-30, and the average loan per member has increased in the same period from Rs. 46.2 to Rs. 99.8. It is interesting to note that the percentage of overdues has slightly decreased from 12 per cent. in 1928-29 to 11.2 per cent. in 1929-30, while the amount overdue per member has slightly increased from Rs. 12 to Rs. 12.6. Interest rates in general are well below those of rural societies in the same province. The strong unifying force of caste has been turned to good account in this respect and credit societies on a caste basis are reported to have been generally successful. Some of the communal banks in Sind have been particularly prosperous and the lending limit per member of two banks there is as high as Rs. 10,000. The great danger in connection with all urban credit societies is the losing sight of their primary objective, the encouragement of thrift, and degeneration into mere money-lending societies. This is particularly the case in salary-earners' societies where loans, however necessary, cannot be called productive in the sense that repayment can be expected out of the proceeds of the funds employed. Credit for consumption is a risky business at best and controlled credit is very necessary. The salary earners' societies have been fairly successful. Many important Government offices and private firms have their own credit societies. The best example is the Co-operative Bank of the Bombay, Baroda and Central India Railway Company which has received the special commendation of the Whitley Labour Commission. During the five years 1924-29 it had loaned 11/3 crores of rupees, the losses amounting to less than 1/10 per cent. The fixed deposits amounted to about Rs. 25 lakhs and the savings account deposits to about Rs. 8 lakhs. The railway really manages the society which does a great deal of useful work but its designation "co-operative" is open to question. Some of the Bombay cotton mills have also very flourishing credit societies but deposits from members are disappointing. In such societies, whatever may be the form, the real control is not democratic. Bad debts are negligible where there is a reasonable security of tenure. Urban credit societies of unlimited liability have existed chiefly among the depressed or backward classes. Their record has varied in different parts of the country and while in Bihar and Orissa and Bombay they have been a failure, in Madras and Mysore they have achieved a remarkable success.

Central Financing Agencies. The formation of central financing agencies on co-operative lines, with the object of raising funds for advances to primary societies, was found absolutely necessary in order to place the financial structure of the movement on a sound basis. As we have already seen, the Co-operative Credit Societies Act of 1904 made no provision for these central financing agencies, and it had to be amended by the Co-operative Societies Act II of 1912 to remedy this defect. The central agencies for finance and supervision may be classified under three heads: unions, central banks and provincial banks. We shall now proceed to discuss each of them in some detail.

Unions. The union of primary societies has as its most important function the supervision of its constituent societies and advising on the grant of loans to them. The Maclagan Committee defined a union as a body of which the only members are the primary societies within a circle of a radius averaging generally about eight miles, and at the deliberations of which each member society has a number of votes proportionate to the number of its own members. It was a serious mistake on the part of the Maclagan Committee that it strongly recommended the system, which had sprung up in Burma, under which all the union members shared in the liability for a loan granted to any of them on the union's recommendation. Bombay, the United Provinces. Bihar and Orissa and the Central Provinces and Berar, as well as Bengal, experimented with guarantee unions, but most of them have abandoned the feature of financial guarantee. And in Burma the Registrar in his annual report for 1928-9 remarked that the system had undoubtedly proved a costly failure. The supervising union, on the other hand, has done useful work. The area covered by a supervising union is ordinarily not larger then a taluka. In many places primary societies are not grouped in unions yet, but the aim is to accomplish this as soon as possible. The unions in some cases help the societies in preparing their normal credit statements, check their accounts periodically, and keep a watch over recoveries. In theory, the union is the most suitable

agency to finance co-operative societies, and represents the ideal to which the financial structure of co-operation must aspire. In practice, the mixed type of co-operative bank, which consists of individual shareholders as well as member societies, predominates in the country. Roughly speaking, if a straight line is drawn across the map of the country from Calcutta to Karachi, unions of the pure federal type are numerous to the north of this line, while unions of the mixed type predominate in the south.

Central Banks. The central banks form a necessary connecting link between the primary societies, which could not by themselves attract enough funds, and the depositors, provincial banks and the money market, which are reluctant to deal with the primary societies on account of the peculiar nature of their business, the extent to which they rely on personal credit and the difficulty of supervising them. Under the Act of 1012 central banks must have limited liability because they have registered societies as members. Their area commonly corresponds to a revenue district and the Maclagan Committee expected a central bank ordinarily to deal with at least 200 to 250 societies. Central Banks are of three general types according to their composition. The first type is a bank of which the membership is confined to individuals, or societies admitted on exactly the same footing. This is the least important type to-day and in fact there is hardly any central bank which has no societies as members. The second type is a bank of which the membership is confined to societies. The third type is a bank which includes societies and individuals as members, and secures to societies separate representation and controlling influence, at least in theory, on the board of directors. majority of the central banks to-day are of the third type. From the point of view of co-operative principles the federal type is the best, and the Maclagan Committee was opposed to the membership of individuals in central banks and favoured their gradual elimination. But in practice the mixed type is most popular in almost all provinces, as it provides for the inclusion of public-spirited and influential local men who supply the necessary business ability, which is frequently lacking when membership is composed wholly of societies, and who materially enhance the credit standing of the central banks by their presence. The great majority of the transactions of the ordinary central bank are with agricultural credit societies.

The Working of Central Banks. There are four main sources from which a central bank derives its working capital: share capital, reserve fund, deposits, and loans from banks or Government. In 1931-32 there were 505 central banks in the country and their total working capital stood at Rs. 30.6 crores. The share capital amounted to a little under Rs. 3 crores. No individual shareholder is generally permitted to hold shares of more than Rs. 1,000 while an affiliated society is required to subscribe to the shares of a central bank in proportion to its borrowings. The reserve funds of the central banks amounted in 1931-32 to a little over Rs. 21/2 crores. In addition to the statutory reserve, almost all central banks have special reserves created for special purposes or objects, such as bad debts, building and dividend equalization. The paid up share capital and the reserves constitute the owned resources of the central banks, as distinguished from borrowed resources, and provide the guarantee fund against which additional funds are raised by them in the shape of deposits or loans. The usual proportion between the owned and borrowed resources of central banks is 1: 8. Deposits from members and non-members constitute the bulk of the borrowed capital of central banks and are an indication of the public confidence placed in these institutions. The total amount of deposits held by central banks in 1931-32 from individual and other sources amounted to Rs. 18.5 crores. and from primary societies to Rs. 2.7 crores. The principle usually observed by these banks is not to grant loans to societies for periods longer than those for which deposits are available. In addition to the deposits, central banks raise loans from other banks or from Government. In 1931-32 the total amount of loans held by central banks from outside banks, from other co-operative banks and from provincial banks was Rs. 3.7 crores, and from Government Rs. 52 lakhs. Borrowings from

outside banks are generally confined to a limited accommodation from the Imperial Bank of India, and the main source of loans is the provincial bank. The working capital of central banks is increased by the Government authorities in many provinces permitting state railways and local bodies like municipalities, taluka boards, and district boards to deposit their surpluses in them. The total advances made by central banks to societies at the end of 1931-32 amounted to about Rs. 8 crores. The management of most central banks at the present time conforms more closely to sound banking practice than in 1915 when the Maclagan Committee complained that most of them made a very inadequate provision of fluid resources. The cost of management varies from province to province in accordance with the functions assumed by the central banks and averages 1.1 per cent, of the working capital for the country as a whole. The rate of dividend paid varies from 6 to 10 per cent. but the former is the most usual rate. So far there seems to be no serious complaint of competition with joint-stock banks, although premonitory indications are not wanting that as the central banks increase their strength, their activities may be felt to trespass on the preserves of the commercial institutions. The central banks in Bombay are more like ordinary commercial banks than in other provinces. It is not considered advisable for central banks to make long term advances. The ultimate security for all advances of a central bank to an agricultural society is the property of its members, but the basic security is personal and depends upon mutual knowledge and joint responsibility of the members. The difficulty in accurately gauging the latter has forced the central banks to place more reliance on the tangible assets; and the extent to which a seciety is permitted to borrow is limited to one-third of this.

Provincial Banks. All the major provinces except the United Provinces have apex banks functioning in them. There are also apex institutions in Mysore and Hyderabad, and in some other Indian States there are institutions corresponding to the apex bank or functioning as such. The aim and purpose of the apex banks is to co-ordinate the working of the banks on

a provincial basis and to act as the balancing centre of the various central banks in the province. The provincial bank is the final link in the chain between the small, scattered primary societies and the money market. Its relations with the primary societies may be direct but are more usually through the central banks, and interlending among the central banks is prevented in order that there may not be intermingling of the liabilities of the central banks. The constitutions of the provincial banks vary considerably, and in most of them there are individual shareholders as well as representatives of co-operative societies and central banks. The general tendency at present is towards the gradual elimination of individual shareholders and making the provincial banks of the pure federal type. All apex banks depend for their working capital largely on deposits from the affiliated co-operative societies as also from the public. 1931-32 the working capital of the provincial banks amounted to Rs. 9.89 crores which was made up as follows:

Share C	apital	•••		• • • •	66,99,000
Reserve	& ntl	ier Funds	•••		47,94,000
Deposits	from	individuals	•••		4,81,97,000
,,	,,	Provincial 8	z Central Ba	nks	3,24,30,000
"	,,	Societies			49,22,000
"	11	Government	t		18,60,000
			Total Rs.		9,89,02,000

No difficulty is experienced by most provincial banks in getting enough capital for all their present needs. In fact there is a permanent glut of capital at the apex, the maximum utilization of which awaits the further development and expansion of the movement. As the balancing centre for all subordinate co-operative societies, the provincial banks must maintain large fluid resources and there is inter-lending of surplus funds between them. In 1931-32 about one third of the investments of the provincial banks were made with private individuals and amounted to Rs. 3.28 crores. The provincial banks also carry on ordinary banking business and the provincial banks of

Bombay, Madras and the Punjab have floated long term debentures for engaging in land-mortgage business on a long term basis. In all provinces the apex banks have connected themselves with the Imperial Bank of India and have secured cash credit accommodation on furnishing security. In the earlier stage the Imperial Bank granted accommodation on the security of co-operative paper endorsed by the provincial bank. of late the Imperial Bank has changed its policy and now gives accommodation against Government paper. This is undoubtedly a matter of regret and the Central Banking Enquiry Committee* has rightly pointed out that as the Imperial Bank enjoys the benefit of the large free balances of Government, there is a moral obligation on its part to finance the co operative societies. It must be said for the Imperial Bank that the steadily increasing percentage of overdues of co-operative societies does not make their financing a particularly sound business proposition. The absence of systematic arrangements for discounting cooperative paper is an undoubted weakness in the position of the provincial banks. In other countries this function is performed either by the state bank or by a specially constituted cooperative state bank. It is to be hoped that the recently started Reserve Bank will meet this want. Among the provincial banks Bombay stands pre-eminent as it has developed commercial banking on a large scale. The Burma Provincial Bank is in liquidation; the Provincial Committee on Co-operation recommended the liquidation of the provincial bank in the Central Provinces; and in Assam the Banking Enquiry Committee reported that there was no one with banking experience on either the directorate or the staff of the provincial bank there.

All India Co-operative Apex Bank. The question of a State co-operative apex bank for the whole country to provide financial stability by making rediscount facilities available was raised by the Maclagan Committee in 1915, but it thought it idle to hope that the Government of India would incur the expense involved in its establishment and maintenance. It was

^{*}Report, Vol. I. p 144.

discussed again at the 1928 Conference of the All-India Provincial Co-operative Banks' Association, but the consensus of opinion seems to be that it can do nothing in the present circumstances that is not being done by the provincial banks, singly or in co-operation. The best service that Government can render the movement would be that the recently started Reserve Bank should be required to provide ample rediscount facilities. It is to be earnestly hoped that the investigations which Mr. M. L. Darling has carried out in this connection will have fruitful results.

Land Mortgage Banks. The loans advanced by co-operative societies to their members and by the central financing agencies to their constituent societies are, from the very nature of the source from which they derive the bulk of their finance. for short or intermediate terms only. Thus no provision is made for long-term credit; and it is now realized that failure to make arrangements for long term loans renders the movement liable to the charge of tinkering with the problem of rural indebtedness. It is no exaggeration to say that no aspect of the co-operative movement in India is more important or fraught with greater possibilities than the provision of long-term credit. The desirability of separating the business of long-term from short-term credit is now generally recognized, and their combination would only handicap the financial arrangements of the institution which attempts it. Short or intermediate term loans can, if judiciously employed, prevent any further increase in the burden of indebtedness, though even that in the present state of uneconomic agriculture seems scarcely possible; but it cannot leave any adequate margin of saving which could be employed to redeem past follies or misfortunes. The need for long term loans to the agriculturists for the redemption of old debts and for land improvement seems obvious, and it has now been recognized that the time has come for the provision of this facility by the starting of land mortgage banks on an adequate scale. It is conceded that state aid is indispensable to the success of land mortgage banks. It may take the form of administrative help in land valuation, of Government loan,

of guaranteeing interest on debentures and recognizing them as trustee securities, or of introducing the security to the market in the initial stages by the investment of public funds in the issue. The Bombay Banking Enquiry Committee makes the constructive suggestion that part of the funds collected by postal savings banks in rural areas be made available to the co-operative societies, including land-mortgage banks, at rates not much higher than the 3 per cent allowed to postal savings depositors. The Committee points out that this would meet much of the objection that postal savings banks drain the districts of capital that otherwise would be available for financing agriculture and local trade. The Royal Commission on Agriculture approved of Government guarantee of interest on the debentures of land-mortgage banks, but was of opinion that the issue of such debentures should be controlled by a central organization to prevent competition in the money market.

The Working of Land Mortgage Banks. The first land mortgage bank in the country was registered in the Punjab in 1920. At present there are 12 co-operative land mortgage banks in the Punjab. Two of these operate over whole districts, and the rest confine their operations to a single tehsil. Bombay has three land mortgage societies which have only recently started their operations. Bengal has two, Assam has five, and Madras has thirty eight primary land mortgage banks, and a central land mortgage bank has been started recently. It seems to us that if land mortgage banks are to function effectively, a central land mortgage bank for every province is an indispensable necessity. Among the objects for which these banks advance loans are the redemption of old debts, improvement of land and the method of cultivation, and the purchase of land in special cases. It is perhaps too early to pronounce on the success or otherwise of these few banks. but in the Punjab, where land mortgage banks had the earliest start, at the end of 1929-30, 30 per cent. of all borrowers from land-mortgage banks were in default, and this in spite of the vigorous policy followed there under which almost three hundred defaulters had been proceeded against and as many as thirty six put in jail. The fact of the matter is that unless agriculture becomes a paying industry, the redemption from debt is impracticable and illusory, and the agriculturist cannot help becoming a defaulter. The Central Banking Committee is of opinion that the resources of the land mortgage banks for a long time to come should be utilized for enabling the cultivator to redeem his land and his house from mortgage and to pay off his old debts. We venture to repeat that without an improvement in agriculture which would make it a remunerative proposition, the problem of indebtedness cannot be seriously tackled; and to make indebtedness the central issue is to treat the symptoms rather than the disease.

Other Types of Co-operation. While co-operative credit covers 83.4 per cent of co-operative activity, the remaining 16.6 per cent is spread out over a considerable variety of co-operative enterprise such as marketing societies, consumers' societies, industrial societies, societies for the consolidation of landholdings, irrigation promotion societies, labour contract societies, insurance societies, housing societies, better living societies and others. Non-credit societies have been brought officially under the aegis of the co-operative movement from 1912 onwards. We shall now proceed to consider briefly the working of these various societies.

Co-operative Marketing. Marketing occupies a much cmaller place in the co-operative picture in India than in many countries, notably Denmark and the United States, but no other non-credit line of co-operation, with the exception of consolidation of landholdings, appears to be more promising, as group marketing is always more effective than individual marketing. The development of co-operative marketing, however, is closely bound up with the problem of credit, for the claims of the sowcar generally restrict the cultivator's freedom of action in disposing of his crop; and competent observers are of the opinion that the success of co-operative credit is jeopardized, to a considerable extent, by the absence of organized marketing. At present the average cultivator is at the tender mercy of the

village sowcar as much for his marketing as for his credit and gets anything but a square deal. Much of the co-operative marketing in India represents subsidiary undertakings by societies having credit or some other activity as their main function, although in several cases a separate organization is provided. Sales societies in Bombay Presidency really represent a co-operative brokerage business which works on a commission basis. From 60 to 80 per cent of the value of staple produce is loaned on it. The cotton sale societies of Bombay have been the outstanding success in co-operative marketing. The Hubli Co-operative Sale Society has been able to attract 15 per cent. of the cotton marketed in the area. This is the more remarkable when we bear in mind that the large cotton marketing associations in the United States handle only about 6 per cent. of the total crop. It is estimated that the Hubli Society has benefited its members since 1917 by extra profit of over 3 lakhs of rupees. The Guirat Co-operative Cotton Sale and Ginning Societies Union is the first marketing federation in the country and has been equally successful. The better quality of seed supplied by the federation has resulted in a marked improvement in the quality of the cotton produced. The fedenation is reported to have gained the confidence of the market and to have first preference from buyers in its territory. In 1030 the federation sold cotton to the value of over Rs. 20 lakhs. The co-operative marketing of jute and paddy in Bengal has not been successful on account of lack of practical business experience, the active opposition of Marwaries and inadequate local or Governmental financial support. On the other hand the Ganja Cultivators' Co-operative Society at Naogaon, Bengal, has achieved by co-operative effort a practical monopoly of the disposal of ganja and is reported to be very prosperous. Bengal is pre-eminent in the co-operative dairy field, with over 150 milk societies. The pasteurizing equipment and automatic machines of the Calcutta Milk Union are the most up-to-date in the country. It did a business in 1929 of over 5 lakhs of rupees. The expansion of the milk societies has resulted in the creation of a new official post, Superintendent of Milk Societies,

the holder of which assists in their promotion. By the success of these societies the production of milk has been increased and the breeding of improved strains has been stimulated. The Punjab has several commission shops which provide storage facilities, and Madras has a number of small sale societies which have not made much progress so far, and there are a few socieites in Bombay for the sale of miscellaneous things such as jaggery, tobacco, chillies, paddy, onions and arecanut. The major difficulties of co-operative marketing are the lack of efficient management, the complex working of these societies, the difficulty of providing for marketing finance, the lack of godown and storage facilities, the apathy and disloyalty of members and the opposition of conflicting interests. The lack of efficient management is the greatest handicap. Among the advantages of co-operative marketing, absence of fraud in weighment, adequate and high prices, insurance of produce against risks of fire, prompt payment of sale proceeds, financial accommodation till the produce is sold, information of price fluctuations in the market, supply of gunnies and genuine and certified seed may be mentioned. Sir Lalubhai Samaldas. President of the All-India Co-operative Institutes' Association, believes that financial help from Government is indispensable to the success of co-operative marketing associations. proposal of Professor Kaji for strong commodity sales institutions, which would not be federations of member societies but would act as efficient and disinterested middlemen, also merits very serious consideration.

Co-operative Consolidation of Land Holdings. One of the most serious handicaps of agriculture in India is the fragmentation of land, due to inheritance and the gradual break up of the joint family system and the system of cultivation in common. The only remedy is the consolidation of land holdings; and the benefits of co-operative consolidation have been described as much the most remarkable instance of material improvement due to co-operation. The movement began in the Punjab in 1920-21 and 2,63,462 acres had been consolidated there upto July 1930 at an average cost of Rs. 2-5 per acre.

The fundamental weakness of the system, from the point of view of co-operative principles, is that the whole cost of consolidation, of which surveying is responsible for a considerable part, has been borne by the Government, and the people nowhere seem sufficiently keen for consolidation to pay for it. Improvement of agriculture has invariably followed land con-Hundreds of new wells have been sunk; some solidation. waste land has been brought under cultivation; and some dry land has been brought under irrigation. New ploughs and other implements are used, new crops or new varieties of au old crop are sown, sand is removed from light soil, and planting of trees is carried out. Access has been obtained to the roadways and farming has become more intensive. The general effect has been to increase the yields and the rents and to decrease quarrels and litigation. But this movement, so beneficent in every way, has not been successful outside the Punjab; and even in the Punjab it has hardly touched the fringe of the problem, as out of the total cultivable area of about 30 million acres it has affected a little over a quarter million of acres. Co-operation makes the pace very slow as unanimous consent to consolidation by all participants in the scheme is always required. Compulsion, therefore, will be necessary for a wide extension of consolidation of land holdings, and its introduction is only a matter of time.

Co-operative Irrigation and Land Reclamation. Co-operative irrigation societies are most important in Bengal where they are very popular. From a humble beginning of 3 societies in 1919, the irrigation movement to-day claims about 1000 societies in the western districts of Bengal where irrigation is a necessity, with a membership of over 20,000, a paid up share capital of over Rs. 2 lakhs, and a working capital of over Rs. 4 lakhs. Limited liability societies are formed, the members taking shares proportionate to the area of their respective holdings, and borrowing from their own financing union or central bank. After the irrigation work is completed, an annual water levy on each acre irrigated is made, with the proceeds of which the loan is repaid with interest. In the

Sunderbans similiar societies are formed to construct embankments to keep out flood waters. In Madras the characteristic parallel movement is the reclamation of land covered by sand in a flood. The Punjab has sixteen silt clearance societies and there are scattered irrigation societies in other provinces.

Co-operative Consumers' Societies. Co-operative Consumers' Societies in this country have had generally a very sorry record. The reasons for this state of affairs are the small capital of the societies when started, the want of experience and business ability of the workers, the complicated work of a store society, the absence of any common tie between the members, the narrow margin between wholesale and retail prices, strict adherence to non-adulteration and correct weights and measures in a competitive market where these things are generally absent, and insistence on cash payments. In practically all provinces to-day there are a few successful consumers' societies. discouraging though their record on the whole is. This phase of the movement has been generally more successful in Madras and Mysore. The Triplicane Urban Co-operative Society, Ltd. of Madras, started in 1905 by fourteen Rochdale enthusiasts, mostly schoolmasters, is an outstanding example of success. In 1931 they had 7000 members and their twenty-five branches made sales of about Rs. 13 lakhs. Another remarkable record has been made by the Matunga South Indian Co-operative Consumers' Society. In 1929-30, on a share capital of only Rs. 4,427, it made sales of Rs. 75,000 and a profit of Rs. 2,100 or almost 50 per cent. of its share capital. In the light of past experience, conservatism in the establishment of consumers' societies seems to be the obvious policy to be pursued; and at present the next step undoubtedly is the encouragement of purchases on indent by primary societies, which offers much greater chances of success and involves little, if any, risk. Considerable progress in this direction has been already made and the extension of such purchases offers the greatest promise for co-operative consumption under the present circumstances.

Better Living Societies. Better living societies are a development characteristic of the Punjab, though not exclu-

sively confined to that province. There are about 300 such societies in the Punjab and they have been doing quite important work in their own way. The societies take only a small entrance free from the members, and they lay down a programme of social reform and make rules for carrying it out from year to year, violation of which is punishable with a fine which in some cases is as high as Rs. 100. In practice the main activity is the reduction of expenditure on social ceremonial. One better-living society in the Punjab is reported to have reduced the cost of marriage from Rs. 500 to Rs. 70 for a boy's family, and from Rs. 800 to Rs. 300 for a girl's family. The society fixes the number of guests that may accompany the bridegroom to the bride's home, and the old custom of displaying the bride's presents has been abolished. The one better-living society for the whole Audich Brahmin community in Baroda State is reported to have saved Rs. 94,560 by reducing ceremonial expenditure. In addition to the curtailment of ceremonial expenditure, some of these societies have levelled and paved and swept the village streets, some have promoted sanitation, some have induced the villagers to improve ventilation in their houses, some have repaired and roofed the village drinking well, some have arranged that all manure should be pitted, some have discouraged expenditure on jewellery, and some have stopped waste on farms. It is earnestly hoped that such better living societies would spread all over the country, or better still that the co-operative credit societies would take upon themselves the functions performed by these societies. The general work of village uplift and the improvement of the economic position of the agriculturist are intimately connected together.

Co-operative Housing Societies. The housing societies are a bright spot in the Indian co-operative picture, and though the development has been modest, it is encouraging as far as it has gone and promises well for the future, if the necessary financial support is forthcoming from the Government. The great need of these societies is cheap capital, and it is now generally admitted that Government loans at reasonable rates.

are indispensable. The prevailing cheapness of capital ought to be utilized to solve the urban housing problem. This phase of the co-operative movement has not touched all the provinces, and is most prominent in Bombay and Madras. Madras has about 130 housing societies with a working capital of Rs. 40 lakhs, and the provincial government lends them at 61/2 per cent., the societies charging their members 71/2 per cent. The loans are for twenty to thirty years and are confined to the purchase of sites and construction of new houses. have been negligible. In the Bombav Presidency in 1031-32 there were 83 societies with a total working capital of Rs. 89 lakhs; and they are not mere lending societies as in Madras and elsewhere in India, but undertake the construction of buildings. The housing societies started so far are confined to the middle classes and are generally on a communal basis; and no housing societies have yet been started for the working classes. Under the ownership system in Bombay, each member provides one third of the cost of his house and the government lends the remaining two thirds, payable in twenty years, the maximum amount allowed to a member being Rs. 10,000. In the Bombay Presidency the development has been greatest in Bombay City. Ahmedabad and Karachi. The Registrar characterizes the success of the societies at Karachi from 1928 to 1930 as "marvellous", and we can bear testimony to it from personal observation. The main criticism against co-operative housing is that it has failed to provide for the working classes, and the rate of interest charged by the Government, in view of the prevailing cheap money, is excessive. A serious drawback of the ownership system is that the members of the society have an unrestricted right to transfer their property to any person, with the result that many houses built with the help of cooperative money, have passed into the hands of speculators. Some restrictions on the right to transfer are being now imposed. Co-operative housing is yet in its initial stages.

Co-operative Educational Societies. The problem of illiteracy is a very big problem and everywhere it has been solved by the Government. But meantime co-operation is

seriously handicapped by illiteracy, and co-operative educational societies have been started in some of the provinces, notably in the Punjab. In that province the number of schools for the education of adults started under the auspices of co-operative societies and such other agencies is as large as 2000; and the number of co-operative schools for the compulsory education of children is 150. The schools are financed from the fees paid by the pupils. The promotion of adult and primary education is receiving increasing emphasis in the programme of co-operative societies in many provinces; and a considerable part of the share in the profits, which may be devoted to charitable or benevolent purposes, goes to the support of night schools for adults and primary and high schools for children.

Industrial Societies. Industrial societies have started in some provinces to help the artisans engaged in cottage industries. The Royal Commission on Agriculture considered co-operative organization and the provision of facilities for technical education as the best aids that can be given to village industries. To these should be added facilities for marketing the artisans' products, the non-provision of which so far has proved the chief stumbling-block. The record of co-operative industrial societies generally is not very satisfactory, and it should be frankly recognized that in face of the rising tide of the industrial revolution, industrial co-operation can act as a palliative and not as a cure. In the Punjab there are 320 industrial societies, of which 197 are weavers' societies and 57 shoemakers'. Their total working capital was Rs. 6,94,000 of which owner capital represented over one-fourth. Rs. 1,80,000. The purchase of raw materials saves the handloom weaver from 15 to 20 per cent. on middlemen's charges; and the significance of this saving is the greater since the average hand-loom weaver is able to earn, with his family, but five or six annas a day, and is always just on the verge of statuation.

Other Co-operative Societies. There is, besides, a considerable number of other co-operative societies for a large

variety of objects. Co-operative labour contract societies have been formed in Madras, the Punjab, Travancore and Kashmir to take contracts directly from principals for road-making, wood-cutting, carting, or field labour, with the idea of securing to members the profit which otherwise would go to the professional contractor who hired them. In Travancore public works contracts are placed with the labour contract societies. On the whole the co-operative development in this direction is disappointing but not hopeless. Until quite recently, cattle insurance societies were the only type of co-operative insurance developed in India, but their popularity has waned until they are found to-day in only three provinces, Bombay, Madras and Burma, and bid fair to die out even there. Cattle insurance has not proved popular anywhere in India, and is obviously too advanced for the average Indian member; but as the scientific stock-breeding, which is so urgently needed, progresses, the increased value of individual annimals may lead to a demand for the re-establishment of such societies, and this phase of the movement may yet revive and flourish. The cooperative life insurance or benefit societies, which are begining to make their appearance, have more vitality at present. There has been some co-operative development in scientific stockbreeding. Madras has done a little sheep breeding, Bengal cattle breeding, Ajmer poultry breeding, and in Baroda the movement is more extensive with five cattle breeding societies, besides twenty-nine milch cattle societies. Here again the Punjab leads with 150 stock breeding societies. Excessive litigation is a general evil throughout the country, and in this respect also the co-operative movement has been helpful. In Bengal the model by-laws of village societies require submission of members' disputes to arbitration by the managing committee, under penalty of fine. The number of disputes arbitrated in that province rose in 1928-29 from 1,651 to 3,335. The setting up of separate societies for arbitration is peculiar to the Punjab, where there are forty-nine such societies. The importance of arbitration is apparant from the fact that about 250,000 suits are filed in the courts of that province each year,

one half of which involve less than Rs. 100 each. Members are bound, under penalty of fine up to Rs. 100, to submit certain types of disputes to arbitration and to abide by the award. Malaria is a terrible scourge everywhere in the country and particularly in Bengal where, unlike many other provinces, the rural death rate is higher than the urban death rate. There are now about 600 anti-malarial rural societies, and their work consists of filling up all stagnant pools and ditches within the village areas during the dry season, and kerosining all stagnant accumulations of water immediately after the rains. depend for funds on subscriptions, donations and grants from members, benevolent individuals and Government. Some of the societies maintain a medical man on the subsidy system and he attends to the families of members free of charge. These societies do not pay their way and therein lies their There are numerous societies of other types, generally one or two of a kind, scattered throughout the country. Thus Baroda has four power-pump societies to provide cheap water, the profits going to members, and a cooperative water works society; Mysore has a pest-prevention co-operative society; the United Provinces have physical culture societies; Burma has two societies which lease markets and sub-let them: Madras has a co-operative pharmacy; and the Punjab has several fruit-plantation societies, crop-failure relief societies to the number of fifty-two, three societies for fodder storage and fifteen land-revenue redemption societies. The object of the last-named societies is to build up, by annual contributions for a period, generally twelve years, a fund sufficient to produce enough interest to pay the members' landrevenue assessments indefinitely.

An Estimate of the Co-operative Movement. The Co-operative movement in India is about thirty years old. What has it achieved and how far has it justified the hopes of its early sponsors? It is not putting it too strongly to say that co-operation is on trial for its life in Burma. The movement apparently is in a very bad way indeed in Bhopal and is tottering in the United Provinces. It is none too firmly

entrenched in the Central Provinces, Berar and Assam. In order to make a critical evaluation of the movement, it is necessary to discuss briefly the present extent of co-operation, the handicaps of the movement, its own weakness and finally, in spite of everything, what it has been able to accomplish.

The Present Extent of Co-operation. At the close of 1931-32 the total number of primary societies was 1,06,050 with a total membership of 42,94,330. Agricultural societies constituted slightly over 88 per cent. of the total and the nonagricultural societies were slightly under 12 per cent.; but the percentage of members of the agricultural societies was slightly over 72 and of non-agricultural societies slightly under 28. The total working capital was Rs. 92.69 crores, but it must be remembered that a certain amount of duplication is involved in including in the total the working capital both of the primary societies and their financing agencies. principle co-operative activity has been concerned with credit, and the credit societies constituted nearly 83.4 per ent. of the total, and the remaining 16.6 per cent, were concerned with non-credit activities. One of the healthiest factors in the movement is the steadily growing reserve fund of Rs. 11.43 crores which constitutes 12.2 per cent. of the working capital. It is obvious that the movement so far is predominently a rural credit movement, although the urban societies, in number, in membership and in financial strength, occupy a position of far greater relative importance than the percentage of urban population would warrant. On the face of it the movement has shown steady progress, and the growth in number of societies, in total membership and in working capital has proceeded quite regularly for the country as a whole, regardless of set-backs experienced in some areas. It is disappointing to observe that members' deposits, which averaged 20.7 per cent. of the working capital between 1906-7 and 1909-10, had sunk in relative importance to 6 or 7 per cent. within ten years and the figure for 1931-32 is 7.3. Non-members' deposits have ranged rather consistently between 25 and 30 per cent., and the figure for 1931-32 is 30, which is an eloquent testimony of public confidence in the movement. While urban co-operation is numerically so much weaker than rural, it is generally in a more thriving condition. The effect on the *morale* of co-operators does not lend itself to calculation in percentages, nor does the effort being put into educating members in co-operative principles.

The Handicaps of the Movement. The greatest handicap of the co-operative movement in the country is undoubtedly the complexity and the toughness of the problems it is called upon to solve. For instance, the provision of short term credit at reasonable rates for current needs will do the agriculturist little good so long as he is carrying the crushing burden of his indebtedness; and the provision of long-term credit for relieving him of his debt will not permanently benefit him unless his income can be raised and his expenditure reduced. The raising of the agriculturist's income involves, among others, such complicated problems as the consolidation of land holdings, the improvement of land by irrigation or otherwise, the scientific rotation of crops, efficient marketing and the encouragement of supplementary occupations. The reduction of his expenditure requires, among other things, sound systems of land holding and land revenue assessment, and a social revolution which would relieve him of the heavy burden of extravagant expenditure on ceremonial occasions. A wide spread and wellplanued system of education would be necessary to educate public opinion in this direction; for the prevailing wide-spread illiteracy and lack of business experience are a serious handicap. The difficulties of rehabilitating the artisans are hardly less complex. We have barely mentioned the more outstanding problems, but enough has been said to point out the complexity and toughness of the problems on the solution of which the ultimate success of co-operation depends. A general increase in the rewards of labour is largely outside the scope of the co-operative movement, and must await the better organization of workers and the economic advancement of the country. The best hope of doing lasting good to the beneficiaries of the movement lies in visualizing their problems as

a whole and directing the attack simultaneously on as many fronts as possible. Co-operation, as Sir Horace Plunkett has pointed out, will succeed only as an integral part of a comprehensive agricultural policy. Sentiment in favour of the multiple-purpose society is growing and this tendency is in the right direction. The shortage of funds for the support of the co-operative movement in the several provinces and states is a general complaint. Owing to financial stringency the expansion of the Co-operative Departments has been deliberately checked. This is very unfortunate and a move in the wrong direction. One reason why the Punjab has such a splendid record in the co-operative field is that the expenditure per head of population for the Co-operative Department is the highest in that province and is 9 pies per head as compared to 11/2 pies in Bengal and Biliar and Orissa. And finally the dependence of the major branch of the movement upon climatic conditions is a difficulty the societies cannot easily overcome.

The Weaknesses of the Movement. The lack spontaneity in the Indian co-operative movement is admittedly one of its greatest inherent weaknesses. We have already quoted Sir Horace Plunkett who has stigmatized co-operation in India as not so much a movement as a governmental policy. Discussing this point in 1920 Professor Gilbert Slater rightly observed that "what has been established has been by Government initiative, kept in order by Government audit, and really financed by Government credit, because funds came from people who, as a rule, would not trust their money to the banks unless they knew the Government was behind them."* And what was true in 1920 is equally true in 1935. Registrar is the Brahma, Vishnu and Shiva of a co-operative society. A tendency has been reported in at least one province for the Registrar to go beyond his legitimate functions in the effort to influence political events. Co-operators in Madras are reported not to have been allowed to wear Gandhi caps,

^{*} Gilbert Slater, "Co-operative Stores in India" in Indian Co-operative Studies, p. 238

the symbol of the Congressmen, and the appeal for intensive propaganda by the co-operative societies to encourage the manufacture and sale of khadi, is reported to have provoked a threat of dire consequences to the societies if the proposal was carried out.* The foundations of the co-operative organization built from above must be necessarily insecure. There is a considerable agitation for the deofficialization of the movement, and while the ultimate deofficialization is admitted as desirable. we do not think that the movement, nourished in the hot house atmosphere of official control, can stand deofficialization immediately, and the premature withdrawal of Government control may be fraught with grave danger to it. The Royal Commission on Agriculture† was in favour of strengthening official coutrol while the Central Banking Enquiry Committee! suggested that it should be slackened. Perhaps an advisory council of non-official co-operators for every province would at present be the best means of bringing about greater administrative harmony and effectiveness. The lack of proper education and training of office-bearers and of co-operators generally has been stressed repeatedly. The inadequacy of the provision for long-term credit, which is a nototrious weakness of the movement, has been already discussed in connection with the land-mortgage banks. But the greatest weakness of the movement is due to the exceeding laxity and unpunctuality in the repayment of loans, and the figures for overdue loans are mounting up high enough to cause very serious anxiety. The overdues in 1931-32 were 40 per cent. of the loans. With the catastrophic fall in agricultural prices the overdues have increased alarmingly and since June 1932 the very serious position revealed above has grown still more serious. position varies considerably in different parts of the country, and in those areas where the overdues represent the gravest

^{*} Pantulu, "Co-operation and Agriculture" in Madras Journal of Co-operation, XXII, p. 10 quoted by Hough: The Co-operative Movement in India.

[†] Abridged Report, p. 52.

[‡] Report, Vol. I, p. 130-31.

problem, in almost every case each subsequent year registers a steady deterioration. We are obliged to take a very grave view of the situation. In Bombay and Bengal the authorities have been sanguine that no real danger to the principal is involved in the case of most overdues, on the ground that the owned capital of societies sufficiently covers the entire amount of overdues, and the position is well within the margin of safety. These statements may be true as far as the movement in those provinces as a whole is concerned, but are more than questionable about some of the societies involved. On the other hand experience with liquidating societies in Burma and elsewhere has proved that much of the principal is irrecoverable; and the enforcement of unlimited liability inflicts great misery and pushes deeper into the mire those whom the movement is designed to help. We have previously quoted the opinion of the Registrar in the United Provinces who makes the gloomy prediction that a great part of the loans advanced will prove to be irrecoverable; and the policy of the Imperial Bank in its refusal to discount co-operative paper lends further weight to this opinion. Among the causes of the overdues the crushing poverty of the ryot must take the first place; and we must bear in mind that co-operation cannot solve the problem of the hopelessly insolvent. Bad harvests, lack of proper supervision, and failure to take prompt and adequate steps, are further Disinclination to proceed against fellow-members is wide-spread. Paper adjustment of loans, though a less general evil, has been a real menace to the movement in some of its sections. The inadequacy of finance available to members is understandable; but it is less easy to understand the inordinate delay, personal inconvenience and even indignity which borrowers have to put up with. The emphasis on credit, to the comparative neglect of other fields of co-operative activity, has been frequently set down as a weakness of the movement in India; but the burden of indebtedness has been such a pressing problem, that the stressing of co-operative credit has been justified, though perhaps not quite to the extent to which it has been carried in some provinces.

The Achievements of the Movement. Though problem of credit may have been overemphasised, it must be admitted that even in this sphere the co-operative movement has hardly touched the fringe of the problem and co-operation supplies only 2 per cent. of the annual credit requirements in Bihar and Orissa, 5.3 per cent. in U. P. and from 7 to 10 per cent. in Bombay.* In several other provinces the percentage is much less. The moneylender's financial hold is unshaken but his psychological influence is weakening. The most cheerful side of the picture is the general reduction in interest rates of moneylenders, which has occurred practically everywhere that a successful co-operative society has been established. The present saving in interest charges has been estimated at more than 3 crores of rupees. The record of some individual societies has been really wonderful. One Kashmir village society, with all members free from debt to moneylenders, has accumulated its own capital to such good purpose that its own money suffices for its needs. A Punjab society of 276 members advanced to lakhs of rupees to its members in the course of 17 years, during which no proceedings for default were necessary, nor did anyone have to be expelled. At the end of 17 years it had an accumulated share capital and reserve of Rs. 50,000, and about two lakhs had been deposited by its members. That the co-operative movement is a factor to be reckoned with in the money market is obvious from the size of its working capital, which is now over Rs. 92.69 crores. The co-operative societies have done much to meet the deficiencies in the Indian banking system. But besides its economic results, co-operation is no less important in its general effect on the rural life and constitutes an admirable means of popular social improvement. The reduction in litigation among the co-operators is only one aspect of this improvement; and the influence of the societies is thrown quite consistently on the side of morality and temperence, and against gambling and extravagance. The registrar in the Punjab records the case

^{*} Vide supra, p. 184.

of a retired military man, sixty years old, who walked forty-two miles each way to represent his society at the general meeting of its central bank. The increased openness to suggestions regarding improved methods of production is an important by-product of the movement. And a large amount of good in the aggregate has been and is being done by co-operative societies through their contributions to various charitable and public purposes. Finally, many co-operative societies have brought together on an equal footing people of different castes and creeds in an enterprise for their mutual benefit. This has encouraged a feeling of community of interest in the villages and has also made its contribution to the cause of national unity.

The Potential Contribution of the Co-operative Movement. No soluton of India's problems which ignores or flouts the national psychology can hope to succeed. It is hardly conceivable that materialism will be acceptable to the mass of the Indian people. The co-operative ideal, on the other hand, is well suited to their genius; and "each for all and all for each" is in harmony with their intuitive perception of the fundamental unity which underlies all apparant diversity. Cooperation offers wide opportunities for mutual service and all authorities are agreed about its great importance as a constructive and vitalizing force in the country. The Committee of Foreign Banking Experts appointed in connection with the Indian Central Banking Enquiry Committee came to the conclusion, which the Central Committee wholeheartedly endorses: "The co-operative movement in spite of imperfections and of unavoidable setbacks deserves every possible assistance from all quarters, because there is no better instrument for raising the level of the agriculturist of this country than the co-operative effort, and a strong appeal to the banking interests of the country to assist this movement seems not at all out of place."* But co-operation is not a panacea. The "great and glorious

^{*} Central Banking Enquire Committee Report, Vol. I, p. 145.

future" for the agricultural interests of the country which was to follow from co-operation has been belied by the facts. Some of our greatest economic disabilities are admittedly beyond the reach of co-operative endeavour. The pressure of population on the soil, the excessive dependence upon a single industry and the dependence of that industry on a variable climate, the inadequate rewards of labour and the defective communication system—all these cry aloud for amelioration and before them all the co-operative movement stands helpless and impotent. India's serious economic malady is deep-seated and of long standing. While co-operation alone cannot effect a cure, it can help to mitigate some of the most painful symptoms. We have already discussed its activities in connection with credit, marketing, land consolidation, thrift and the general social amelioration. In all these directions co-operation has achieved varying degrees of progress, although so far, for the country as a whole, it has touched only the fringe of the problem. Co-operation in India has not worked the miracle its original sponsors hoped for, but it has taken an important place among the constructive forces working for the regeneration of the country.

^{• &}quot;If the system of co-operation can be introduced and utilized to the full, I foresee a great and glorious future for the agricultural interests of the country." King-Emperor George V in 1911.

CHAPTER XI.

COTTAGE INDUSTRIES.

The decline of handicrafts: its causes. During the Moghal period, and right up to the middle of the eighteenth century, Indian manufacturing industries on the whole were far more highly developed than those of any other country in the world. The muslins of Dacca, the shawls of Kashmere and the silk fabrics of Murshidabad and other places were exported to every civilized country in the world; the famous Wootz steel (of which the equally famous Damuscus blades were made) continued to be in demand all through the centuries in every Eastern and Western country; Indian dyes had still a world-wide market; Indian ships were navigated across the oceans by Indians, by the Arabs and finally by the East India Company itself.

The decline of these world-famous industries began immediately after the death of Aurangzeb. The country was plunged into a civil war; imperial patronage (on which these great industries flourished) gradually slackened; in the absence of security both internal and external trade suffered. came the Industrial Revolution in England, which coincided with the extension of British political domination in India, As a result of the Industrial Revolution (which enabled England to manufacture various articles more cheaply), India gradually lost her foreign markets. And as there remained no one to protect the industries of India from foreign competition, the loss of political independence resulted in the gradual loss of internal markets to indigenous industries. Britain pushed her own goods in the Indian market by subjecting Indian manufactures to a differential fiscal treatment (in the matter of transit duties), but one may say that these measures merely expedited the extinction and decline of India's manufacturing industries; for in the long run the handicraft products could have never

been able to compete against machine-made goods owing to the gradually increasing differences in costs of production, The highly developed branches of industry, which were dependent mostly upon foreign and inter-provincial custom. were more or less completely annihilated by the middle of the nineteenth century, so that what remained at that time were the industries catering for local markets at places far off from the seaports. During the fifties of the nineteenth century began the construction of railways, and wherever these railways carried foreign manufactures, the death-knell of local industries was sounded. The muslins of Dacca had already become a memory of the past in the beginning of the nineteenth century, the silk weavers of Murshidabad and other places were by that time catering for the Indian market only; Indian ships had ceased to ply on the high seas on account of the competition of iron clad steamships; wootz steel was no longer exported from Southern India on account of its high cost of production. But as no substitutes for the shawls of Kashmere and Indian vegetable dyes were available, they did not suffer from foreign competition; on the contrary there is evidence to show that these industries actually made some headway on account of increase in demand in Western countries. But even these industries were not destined to flourish for long, as we find that while the discovery of synthetic dyes during the last quarter of the nineteenth century killed the Indian dye industry, the change in fashion both in Iudia and abroad has dealt a death blow to the Kashmere shawl industry.

The present position of handicrafts. From what we have said in the preceding paragraph it must not be understood that foreign competition has crushed out of existence all our ancient industries. With the exception of the ship-building industry, which has completely disappeared, almost all industries which have been enumerated above and many more besides, persist up to the present day, though they have lost all their former excellence and importance. The muslin-weavers of Dacca are not all dead; a few of them still survive and are plying their craft, though their skill has degenerated.

Moreover handloom weaving is still carried on in almost every village and town in the country giving livelihood to nearly 3½ million workers and their dependents.* Indeed it may be said that quite a large proportion of the requirements of the poorer classes in the matter of cloth is met by handloom weavers. Mahatma Gandhi's Khadi movement has given great impetus to this industry during the past fifteen years, the benefits of which to the producer and consumer it is not possible to calculate exactly. Again, the silk industry is far from dead: Benares, Murshidabad, Surat and Bhagalpur are still fairly active in meeting the requirements of the Indian market, although they have suffered a great decline on account of the loss of foreign markets and the contraction of demand in the country owing to changes in tastes and fashion. Likewise, the Kashmere shawl industry is still alive, although catering only for the needs of a few wealthy patrons in the country. Even the iron industry, strangely enough, is not completely dead: a few indigenous furnaces are still working in Orissa, the Central Provinces and in the Madras Presidency and are meeting the requirements of those parts of the country which are too far removed from the railway. The dye-industry, far from being dead, is still catering even for foreign markets, for notwithstanding the excellence of the synthetic dye the Western dyers somehow cannot get on without natural indigo.

There are certain handicrafts which, far from showing any signs of decline, have actually improved their position in the past and are showing signs of further improvement with the passage of time. The list of these industries is a long one, but the most important of them are leather tanning, shocmaking, the manufacture of utensils and artistic brassware, wood-work, oil-milling and carpet and pottery manufacture. A bulk of the leather (possibly more than 95 per cent.) consumed in the country is the product of the village and town tanyards that are in no way equipped with modern technique and

^{*} Cf. Census of India Report 1931, pp. 276 and 290.

machinery; and so long as poverty in the country remains unrelieved, we must not expect any decline in the fortunes of this craft. The masses want cheap leather, and it is only the handicraftsman, (whose methods are crude and cost of production next to nothing) who can satisfy this condition. And the same is true of shoe-making. The manufacture of utensils, which is carried on in every large and small town in India, is in a very prosperous condition—in fact in a better condition than it was in the beginning of the present country. The manufacture of artistic brassware is confined to Kashmere, Moradabad, Benares and Tanjore; and though the industry at Benarcs and Tanjore has declined the loss has been more than made up by extraordinary developments at Moradabad and to some extent Kashmere chiefly owing to the impetus given to the industry by trade exhibitions in India and in Europe and America. Woodwork of artistic varietits is confined chiefly to the Punjab, Kashmere and the Western United Provinces, and there is reason to believe that, like brassware manufacture, this industry has also made some headway since the beginning of the present century. Ordinary cotton carpets or durries are manufactured all over the country, while the chief centres of the woolen carpet industry are Kashmere, Amritsar, Agra, Bikanir and Mirzapur The latter industry has made great progress during the past quarter of a century owing to the increase in demand in the European and American markets. As regards oil-milling and pottery manufacture, it may be said that both these industries are in as good a condition as they ever were. The potter still holds his own in every town and village; and while the power-driven oil mill has to some catent captured the market in large towns, in the villages and in small towns the indigenous press still meets the entire demand of the growing population which, owing to pressure on the soil and consequent poverty, can no longer afford to use butter.

That these industries still occupy a very important place in India's national economy is shown by the fact that they give employment to nearly 14 million people. According to the 1931 Census Report 1,54,00,000 persons were engaged in industry in India in 1931.* But as nearly 1,600,000 people were employed in organized industries, the balance of nearly 14 million people must have been engaged in cottage industries. Again, as the workers engaged in all industries supported 18,800,000 "non-working dependents",† we must come to the conclusion that roughly not less than 30 million people in the country were dependent upon cottage industries

The Organization of Cottage Industries. The strength of cottage industries as revealed by the number of people engaged and dependent upon them is not reflected in their organization which, taken as a whole, is the crudest imaginable. There are, however, grades and varieties in this organization. woolen carpet industry as a whole and the brassware industry of Moradabad are organized more or less on factory lines, in which the craftsmen are paid by the piece work system. the other hand in the case of leather tanning, shoe-making, oil milling and pottery manufacture the workers, on account of the nature of their crafts, are independent craftsmen; and they have been able to preserve their independence because they are able to get in touch with the consumer directly without the intervention of the middleman. The worst organized industries, however, from the point of view of craftsmen are cotton, woollen and silk textiles, wood carving and utensil manufacture. In these cases the craftsmen do not depend upon local custom, so that the intervention of middlemen becomes inevitable. The middleman in all these cases is the buyer of finished products and in some cases also supplies the raw materials, and as such is in a position to dictate his own terms to the craftsmen. The consequence of this poverty of organization is that the earnings of the craftsmen engaged in these industries tend to sink to the subsistence level so that they are mostly in debt. The craftsmen themselves being poor and illiterate, their technique is often primitive, and practically nothing has been done to modernize

^{*} See Report, p. 276.

⁺ Ibid.

their crafts. The result is that in some of the industries under the control of middlemen the uniformity of quality and design is completely lacking, which is a great drawback from the point of view of standardization.

The Causes of Survival. If in spite of these drawbacks some cottage industries are flourishing in India, it is because of certain exceptional circumstances. In some cases, e.g. in the case of the silk products of Benares, artistic brassware, woodwork and ordinary clay-pottery, survival is due to the impracticability of applying machinery to the manufacturing processes. In the case of certain varieties of cotton, silk and woollen products, the demand is due to custom and fashion. such it is so small and varied that a factory cannot profitably be set up owing to the smallness of demand. Again, in the case of leather and shoes of indigenous varieties, the ancient methods survive because cheap articles can be produced by these methods only. And lastly in the case of such industries as oil milling, the proximity of the market and the nature of primary and by-products render the position of small scale producers invulnerable.

The Case for the development of handicrafts. The occupations that happen to be a source of livelihood to nearly 30 million people cannot be allowed to languish, especially as organized industry can but give employment to only a fraction of handicraft workers. Again, we have seen that nearly 75 per cent of the population of Iudia is dependent directly upon agriculture, and that the people engaged therein pass nearly six months in a year in idleness. A considerable proportion of these people are either on the borderline of starvation or are actually starving, so that it is necessary that they should be provided with some by-occupation, to enable them to supplement their scanty earnings from agriculture; and the introduction of handicrafs, among other occupations, has been suggested as a means of ameliorating the condition of these people. In these circumstances Mahatma Candhi's handspinning and khadi movement ceases to be a "political stunt" and appeals to us as the greatest constructive scheme put forward for

improving the condition of the starving millions of India; for it ensures the spending of enforced leisure in profitable pursuits and the conservation of none too plentiful food supplies, a part of which would otherwise be given away for the purchase of cloth. As people otherwise engaged in agriculture cannot all be employed in factories, the development of handicrafts appears to be one of the chief methods of helping them out of their uniseries, provided it is at all possible to develop them.

Scope for the development of handicrafts. But as far as we can see, the scope for the development of handicrafts with a view to giving employment to the people who are not engaged in them at present is extremely limited—in fact excepting cotton spinning and weaving there is no other handicraft which can offer employment to the cultivator during the period he has to sit idle. But even this occupation should not be despised as of no consequence : as we have already remarked, it can provide the poorer classes with clothing, which would mean a corresponding increase in their earnings and consequently food supply. Oil-milling, leather tanning, shoe-making and earthen-ware manufacture are the only other industries that can be carried on in rural areas; but as the requirements of the rural population in the matter of these products are already being adequately met, we may say that there is no room for their further development.

On the other hand the more highly developed industries like silk, wool, artistic brassware, woollen carpets and woodwork have decidedly brighter prospects in view of the fact that little has so far been done to stimulate the demand for these products in India or abroad. These products are, in spite of their cheapness and superb workmanship, so little known in India itself, to say nothing of foreign countries, that even a little publicity and modernization of the marketing organization is likely to go a long way towards turning the fortunes of these industries. And along with these measures a little modernization of technique and, as far as possible, the standardization of products, would make progress more lasting and certain.

As regards the introduction and development of new handicrafts, it may be said that the propects are not quite so bright as is generally supposed. It is certainly true that German toys are manufactured by East Prussian craftsmen in their own homes, that the famous Swiss watches and clocks are the products of the cottage, and that in Japan a large variety of products, such as toys, pens and pencils, matches and other articles of minor importance are being manufactured in the cottage. But then it must be remembered that cottage industries thrive on tradition and that while in the above-mentioned countries the tradition, in so far as the practice of handicrafts is concerned, was never allowed to die, in India it has been completely dead for long. It will take time, and possibly a very long time, to revive that tradition and to induce educated youngmen to take to cottage industries. The handicrafts mentioned above are generally adjuncts to large modern factories, and no one would think of setting up these factories unless the supply of suitable craftsmen to take advantage of the opportunities offered by them is assured. Taken all round it seems that the establishment of new handicrafts after the German, or Swiss, or Japanese model will, under the most favourable condition imaginable, be a long and tedious process, while under existing conditions, of which the aversion of the State to render any kind of solid and lasting assistance to industry is the distinguishing feature, it may never be accomplished.

Means and methods of improvement. But it is possible to improve the lot of a very large proportion of the people who are dependent upon handicrafts, which would be a great achievement, as altogether nearly 30 million people are dependent upon them. The handicraft worker suffers from three handicaps: he is illiterate and ignorant, he has to buy dearly and sell cheaply, and the market for his products is in some cases very much restricted. The cumulative effect of all these handicaps is that, in spite of his exquisite skill in the manipulation of materials, his earnings are not any higher than those of an unskilled airban labourer. The illiteracy and ignorance of the worker

reacts upon his skill and ability to adopt more up-to-date methods and appliances. The introduction of better technique and appliances must in fact form a part of his education. Obviously enough it is the duty of the State to undertake this work which at the present time it is completely neglecting. In this connection it may be observed that the provision of facilities for general education will not meet the requirements of the situation; it will be necessary to devise improved methods and to acquaint the workers with those methods. Thus the State will have to undertake at once the general education of the workers as well as research work, demonstration and propaganda. As regards buying and selling, it may be pointed out that at the present time there is no organization to enable the handicraft worker to buy cheaply and to sell his finished products at the highest possible price. He buys his materials from ordinary retailers so that the price he pays is necessarily high; and when he secures his materials on credit he is flecced in a more thorough-going manner. Again, in the absence of any other organization, the workers in the case of certain industries have to sell their finished products to middlemen, with the result that they have often to be content with mere subsistence. These grave defects can obviously be remedied by the establishment of co-operative societies. Buying through these societies would enable the craftsmen to procure materials at somewhere near wholesale prices, while co-operative selling would do away with the middlemen's profits. Moreover, the difficult and urgent problem of standardization can be tackled and eventually solved only by organizing the handicraft workers on cooperative lines. It would be difficult to depend upon private enterprise in these matters; the State itself must take the initiative until the whole organization is so well developed as to be able to stand on its own legs. And, lastly, as regards the development of internal and foreign markets, it may be said that although a great deal can be achieved by co-operative action it would not be prudent to depend entirely upon that organization. While actual marketing operations both in India and abroad should be conducted by cooperative sales societies,

it would be too much to expect these organizations to undertake publicity work by participation in exhibition etc., which, as is the case in other countries, must be undertaken by the State itself.

It would thus appear that the main responsibility for the protection and development of handicrafts lies upon the shoulders of the Government. But until April, 1935, when the Government of India allotted Rs. 1 crore for rural reconstruction to the Provincial Governments, neither the Central nor any of the Provincial Governments had done anything substantial by way of helping the handicrafts. But it must not be supposed that this entire amount has been devoted to the development of cottage industries; the Provincial Governments have spent a greater part of their share on road and radio development in the rural area, so that only a small part of the Central Government's grant has been utilized for the development of village crafts. Even this small help at this late hour seems to have been inspired by political considerations: it seems to have been designed to turn away the attention of the rural population from the activities of Mahatma Gandhi's Village Industries Association which has been started with the object of once again making the village a self-sufficing economic unit. That this sum of one crore has been allotted for rural uplift work mainly with the object of preventing the Mahatma from gaining influence among the rural population and not with the object of actually helping the poor villager is indicated by the fact that, far from co-operating with the Mahatma in his efforts, the Covernment regard his activities in the village with distrust and suspicion, and have gone to the length of circularizing their officials not only to hold strictly aloof from the movement, but, if need be, to prosecute the workers in the supposed interests of law and order. would thus appear that until the political problem is solved economic reconstruction cannot be successfully accomplished. Whether Mahatma Gandhi will succeed in spite of the hostility of the Government yet remains to be seen; but all things considered it seems that philanthropic work in the field

of economic reconstruction has its limitations, and that, considering the magnitude of the problem, little can be achieved without State assistance, and possibly nothing at all when the State has adopted a definitely hostile attitude. The realization of a surplus of nearly Rs. 5 crores has enabled the Government to repeat this grant for rural reconstruction work in 1936—37; but whether it will be repeated even in the absence of budgetry surpluses yet remains to be seen. But one thing is certain: without improving the organization and technique of handicrafts nothing will be achieved, and improvement in organization must precede improvement in technique.

CHAPTER XII.

ORGANIZED INDUSTRIES.

Introductory.

The late development of the factory system: Its causes. We have seen that all the great national industries, on which India's reputation as a manufacturing nation was based, had been annihilated by foreign competition by the first quarter of the nineteenth century. But, unlike what had happened in various European countries, the decline of handicrafts was not immediately followed by the introduction of the factory system. It was during the fifties of the last century that the first cotton and jute mills were started in India, while the development of other industries, such as iron and steel, leather, glass, cement, chemical, paper, woollen and others, began more than half a century later. The causes of this slow progress are many, but the most important of them are scarcity of capital and dearth of enterprise, absence of technical knowledge and the absence of such important basic industries as coal, hydro-electric power, engineering, and steel and chemical manufacture the deficiencies on the Indian side-deficiencies that have not been completely covered up to the present and for which the policy of the Covernment is to no mean extent responsible. All these factors, along with the unfriendly policy of the Government, that have retaided and still retard the progress of organized industries in Iudia will be discussed in detail in the following chapter. At this stage we will confine our attention to describing the present position of these industries as a whole in India's national economy and the history and present position of each important industry.

The beginning and progress of modern industrialism. The first attempt to introduce modern industrialism into India was made in the seventies of the eighteenth century, when two Englishmen, Motte and Farquhar, started their iron works in the Birbhum district. The attempt ended in failure, and

nothing further happened till the thirties of the last century when Josiah Marshall Heath attracted by the fine quality of iron ore in southern India started on a similar venture. This attempt, notwithstanding the financial support of the Company's Government, also ended in disaster. Further attempts to establish the iron industry in India were made in rapid succession during the next forty years, but they all ended in failure. But notwithstanding the fact that iron and steel industry had not yet been established, the manufacture of machinery and chemicals was unknown, and even the coal industry had not been adequately developed—in short all the material bases of modern industrialism were missing-cotton and jute mills began to be set up during the fifties of the last century, and the success of the pioneer concerns paved the way for the rapid development of these two industries. It was also at this time that the construction of railways was started, which led to the development of coal-mining in Bengal and Bihar and Orissa. The establishment of engineering workshops to undertake repair work was the next development. During the last quarter of the nineteenth century silk and woollen mills, sugar and oil factories, glass works, paper mills, hydro-electric works and blast furnaces were established; but so slow was the progress that until the establishment of the Tata Iron and Steel Company's works at Jamshedpur in 1911, cotton, jute and coal were the only prominent industries in India. With the establishment of steel works at Janishedjur one more basic deficiency in India's industrial organization was removed, and the manufacture of tin plates, iron sheets, wires and nails, agricultural implements, railway wagons and structural materials was taken in hand. Again, during the present century the cement industry has been developed on an extensive scale. But notwithstanding all these developments. India is still more or less completely dependent on foreign countries for the supply of such important basic articles as heavy chemicals and machinery. We shall discuss the economic consequences of these deficiencies after we have examined the present position of basic industries as a whole.

The extent of organized industries. From what we have said in the preceding paragraph it must have become apparent that establishments representing almost every industry, excepting of course heavy chemical and machinery manufacture which are the two most important basic industries, are found in India. But in forming an estimate of the importance of organized industries in India's economic life we must not be deceived by the number of industries that have already been established, for it is always the extent, preferably combined with variety, and never variety alone, by which the importance of a national system of industries is determined. Industrial statistics in India are in a hopeless muddle, but according to the Department of Commercial Intelligence and Statistics, in 1931 there were altogether 9485 factories (which included factories owned by the Government and local authorities) in British India and Indian States employing on an average 1,630,037 persons daily.* In these figures are also included such establishments as water works which have absolutely nothing to do with manufacturing operations. Anyhow, even if we accept these figures at their face value, our eyes are at once opened to the fact that after 80 years of effort and development the organized industries in India can give employment to less than one person out of every 200 in the country. Again, to apply another test, the output of the existing industrial establishments in the country meets only a fraction of the total requirements of the country; it is insignificant as compared with the volume of imports from abroad. And this state of affairs is to be witnessed in spite of the fact that the raw materials of almost every industry are being exported in large quantities. We realise that under modern conditions country can or should hope to be entirely self-sufficient in the matter of industrial products, but then at the same time imports and home supplies must not be in a serious disproportion. And in India this disparity is so glaring as to lead even a superficial

^{*} The Statistical Abstracts for British India, Illeventh Issue, pp. 798-821.

observer to the conclusion that the development of industries in the country has not yet seriously begun. That what has already been achieved amounts to only a scratching of the surface will become obvious after we have examined the present position and future possibilities of each industry. We shall first survey the position of basic industries, and in the light of the conclusion arrived at in that connexion examine the present position and possibilities of various industries of the non-basic group.

Basic Industries.

The meaning of the term "basic industries". The manufacturing industries are technically divided into two main groups, viz., basic and non-basic. Basic or key industries may be defined as those which serve as the bases of other industries. or whose finished products are used either as vehicles of production or as raw materials in other industries. products of industries of the non-basic group, on the other hand, can claim no such distinction in regard to their use. To illustrate, both iron and engineering industries belong to the basic group—the former because the metal is used in the manufacture of an endless variety of products, and the latter because the products of the engineering industry, i. e. machines, tools, etc., are used as a vehicle of production in the manufacture of other articles. The products of the cotton, or woollen, or paper industry on the other hand cannot be used either as vehicles of production or as raw materials (except in a limited sense) in other industries. But as certain articles, such as paints and varnishes, vegetable oils, coal and others may be used both for industrial and general purposes, it is not possible to draw a line between the two groups of industries. Obviously a good deal would depend upon the intentions of the consumer: but from the point of view of industry as a whole only those industries may be scheduled as belonging to the basic order whose products are used predominently in actual manufacturing operations in other industries. If we apply this test, we must regard only iron and steel, coal, hydro-electric power, non-ferrous metal, engineering, vegetable oil, heavy chemical and leather industries as belonging to the basic group; and these are the industries we propose to discuss at this stage.

r. Iron and steel industry. We need not try to explain the obvious fact that the iron and steel industry is the basis of modern industrialism; indeed it may be said with justification that even our civilization is based on this industry. However, before the modern system of manufacture and transport is developed on scientific lines in a country, it is always conducive to economy to lay (if it is at all possible to lay) the foundations of that system on the solid basis of iron and steel industry.

But while in every western country the development of the iron and steel industry preceded the development of various dependent industries, in India, as we have already seen, the case was the other way round. The reason is that until recently the technique of this industry had not been so highly developed as to render the production of good quality steel from Indian coal and ores practicable. Attempts were made as early as the seventics of the eighteenth century to manufacture iron by means of charcoal, and the nineteenth century is crowded with these attempts; but they all ended in failure mainly because of the scarcity of charcoal consequent upon the difficulties of transport. It was not till the sixties of the last century were well advanced that experiments were made with the Bengal coal, which eventually resulted in the formation of the Bengal Iron and Steel Company in 1874 with works at Barakar in the heart of the Ranigunj coalfield. It is worth noting that this company was a British concern. The Company suffered heavy losses; in consequence the Government took over the works and proceeded to show, with the help of a Ritter Von Schwartz that iron smelting with coke could be a profitable proposition in India. The works were again sold to a company in 1899 which immediately began to extend and modernize them. In 1905 the company set up a steel plant, but the venture failed owing to various technical mistakes in the construction and operation of the plant. As a result, the manufacture of steel was given up, and the company concentrated its attention on the production of castings. With the increase in demand for its products the capacity of the plant has been gradually increased to over 100,000 tons, though the production at the present time is only about a third of the maximum capacity owing to the prevailing trade depression.

But it was in 1907 that the final stage in the development of the iron and steel industry in India was reached. In that year the Tata Iron and Steel Company was floated with a capital of Rs. 2,31,75,000. The Company's works were set up at Sakchi in the Singbhum district; the blast furnaces were fired in 1911 and by the year 1913 the steel plant was in full blast. The original capacity of the plant was nearly 180,000 tons of pig iron, 100,000 tons of steel, and 70,000 tons of rails, beams, channels, angles, fish-plates and bars. From the very beginning it was obvious that, in view of the tendencies in the industry all over the world, not only was the size of the various units too small, but the manufacturing operations as a whole had been started on too small a scale. Thus the economies of large-scale production could not be realized to the same extent at Jamshedpur as at any of the leading steel works in Europe and America against whose products the Jamshedpur steel had to compete. When we take this fact into account and when we remember that the manufacture of standardized steel in a new locality and out of untried materials involves a number of technical difficulties, we cannot but come to the conclusion that the Tatas had to face an uphill task in competing with the steel manufacturers of Europe and America who had generations of experience behind them. Thus in normal circumstances Jamshedpur would have been completely routed without some kind of protection; but luckily for the Indian steel industry the Great War broke out a few months after the starting of manufacturing operations and gave the Tatas as effective a protection as they could have desired. As a result of the war while the supplies of foreign steel and steel products gradually declined to the vanishing point, the requirements of the Government of India in the matter of rails and structural materials for use in the near Eastern

and other theatres of war increased to an enormous extent. The Tatas sacrificed a part of their profits to serve the Government in its hour of need, but so great was the demand for steel at the time and so limited were the supplies that the company reaped a rich harvest of profits during the war and, in order to meet the demand in the country, greatly enlarged the existing furnaces and entered upon a programme of enormous extensions. These extensions aimed at increasing the productive capacity of the plant to nearly 1,000,000 tons of pig iron and 600,000 tons of steel. A large part of these extensions, however, was undertaken during the years immediately following the war when prices had reached unheard of levels, with the result that they cost the company more than twice of what they would have cost had the Tatas been far-sighted enough to wait till the return to normal conditions.

The initial success of the Tatas brought a number of new schemes into existence, but of these only the Indian Iron and Steel Company with works near Asansol and the Mysore Iron Works at Bhadravati have actually materialized, and even these works have so far confined their attention to the manufacture of pig iron, chiefly for foreign markets. Finding the market for pig iron in foreign countries restricted on account of the existence of tariff barriers, and after running the works at a loss for a number of years, the Mysore Government decided in August 1934 to erect a steel plant at a cost of Rs. 25 lakhs to convert all the pig iron into steel for the Indian market. The Mysore works use chargoal for smulting purposes, and, profiting from the failure of the early European proneers, the Mysore Government have spared no pains to solve the problems connected with the replanting of cut-down forests and the transport of timber to the works. However, the net result of war-time and post-war activities in the field of new flotations and extensions has been that the productive capacity of blast furnaces in India has increased from nearly 200,000 tons of pig iron in 1914 to nearly 1,500,000 tons at the present time, and that of steel furnaces (at Jamshedpur) from nearly 100,000 tons in 1914 to 600,000 tons at the present time.

Another development that has taken place in connection with the establishment of the steel industry at Jamshedpur is the production of wires and nails, sheeting both plain and galvanized, tin plates, railway wagons, agricultural appliances, and steel castings by various subsidiary companies as well as the Tatas themselves. Again, the waste products of the coking plant and blast furnaces are being utilized by the Tatas in the manufacture of various kinds of fertilizers and heavy chemicals.

But in spite of the great developments that have taken place in the iron and steel industry since the war, the imports of iron and steel into India have substantially increased. The imports of iron and steel into India during the 5 years before the war averaged about 800,000 tons a year valued at nearly 12½ croies, while during the 5 years preceding 1929-30 (the last 5 normal years before the trade depression started) imports under this head averaged nearly 1,000,000 tons valued at nearly Rs. 19 crores a year. This increase in the consumption of iron and steel has been due to the fact that larger quantities of the metal are now being used by the building trade, railways and engineering workshops. However, since 1929-30 the demand for iron and steel has declined owing to trade depression, and imports during the four years preceding 1932-33 have averaged only about 350,000 tons valued at about Rs. 7 crores a year. But while India is still a large importer of steel, there is enough surplus pig iron to enable her to export on an average nearly .50,000 tons of the metal every year. Most of this pig iron is taken by Japan, but since the conclusion of the Ottowa agreement small quantities are also being sent to Britain. Again, a few hundred tons of ferro-manganese (which is an alloy of manganese and iron) are also available annually for export purposes.

The progress which the steel industry has made since the war was rendered possible only with the assistance of various fiscal measures. Without these protective measures the industry, far from progressing, would have certainly perished. We have seen that in the absence of foreign competition during the war the Tata Company was in a position to show substantial

amounts of profits. But after the war with the return to normal conditions the profits gradually gave place to losses. Company approached the Government for protection, pointing out that its difficulties were due to foreign dumping, depreciation of European currencies against whose products they had to compete, and their own lack of experience as well as various other handicaps, and reminded the Government of the financial sacrifices which the Company had made during the war case was referred for enquiry to the Tariff Board (which had been newly set up as a result of the recommendations of the Fiscal Commission) in 1923, which after seemingly exhaustive inquiries came to the conclusion that the steel industry satisfied all the conditions for protection laid down by the Fiscal Commission, that the difficulties of the Company were due mainly to higher labour cost which had been operative at Jamshedpur owing to the necessity of training extra hands in anticipation of the starting of new units under the scheme for the extension of works and of employing highly-paid foreign skilled workmen, and that all these handicaps would gradually disappear after the costs have been adjusted to production and the higher staff has been Indianized.

That the Company had been juggling with figures (of their own making) to prove their case for protection is evident from the fact that the advantage of nearly 50 per cent. on the cost of materials over foreign countries could not have been entirely swallowed up by the higher cost of skilled labour and superintendence. The truth is that the difficulties of Jamshedpur were entirely due to mismanagement which the Tariff Board, composed as it was of laymen, was either too incompetent to detect or had no desire to detect. It is a suggestive fact that the Board refused to soil their hands with the evidence offered by Mr. Homi (a former employee of the Tatas) on the ground that it had been obtained by him without the consent of his employers! That the Company relied too much upon Government's good will and charity and too little upon its own efforts is shown by the fact that up till 1924 it had done little towards displacing expensive foreign technicians (who were drawing anything between 200 and 400 per cent. more at Jamshedpur than in their own countries) by Indian staff. Further, the difficulties of the Company have been, and are still, due to the fact that the cost of the plant was unnecessarily piled up by undertaking the extension programme at a time when prices were more than 100 per cent. higher than the normal.

But notwithstanding these mistakes, which were to a certain extent unavoidable in the case of a great pioneer concern, the Tatas deserved protection from foreign competition; for otherwise this important basic industry would have been destroyed, and the closing down of Jamshedpur works would have dealt a death blow to industrial progress in India. The loss of 15 crores invested in Jamshedpur would have had its repurcussions in every field of industrial and commercial activity in the country with disastrous consequences. Apart from that the various important subsidiary industries would have never been established, and all possibilities of establishing the engineering industries in the country would have been completely cut out. In short the closing down of the Jamshedpur works would have been an economic disaster of the first magnitude.

The Report of the Tariff Board was in reality based on these sentiments, though they tried to justify their conclusions by a crude juggling with some sort of facts and figures, of which the Tatas themselves were the authors. But it must be said to the Tariff Board's credit that had it handled those facts and figures more scientifically and had they not been moved by sentiment and other considerations, the steel industry would probably have never received any protection, and as such it would have ceased to exist. Furthermore, the Board did not find it difficult to prove the obvious fact that all the raw materials, such as iron ore, coking coal, manganese ore, lime-stone, dolomite, various kinds of refractory materials and other things being found in abundance in the neighbourhood of Jamshedpur, it would not be difficult for the steel industry in India ultimately to stand on its own legs without the assistance of protective tariffs. In order to enable the industry to tide over the

period of difficulties (during which the works costs were to be reduced and new units were to start operations), the Board recommended a mixed system of bounties and protection.

The scheme of protection recommended by the Tariff Board was incorporated in a Bill, which became the Steel Industry Protection Act of 1024. By this Act protective duties ranging between Rs. 14 and Rs. 40 per ton were imposed on certain varieties of steels and steel products which competed with the products of the Tata Iron and Steel Company. At the same time bounties were to be given to steel rails and fish-plates for three years, the rates being fixed at Rs. 32 per ton for the first year. Rs. 26 for the second year, and Rs. 20 for the third year. These arrangements were to remain in operation for only three years as it was felt that during this period the productive capacity of the works would be developed to the maximum and continental currencies (which were a disturbing factor on account of depreciation and fluctuating rates of exchange) would be stabilized. The imposition of these protective duties would have in any case increased the cost of steel to a corresponding extent, and thus adversely affected the various steel using industries. As these industries (of which the engineering, tin plate, wagon, agricultural implement and steel wire industries were the most important) would have never been able to compete with the foreigner in the Indian market on account of increase in the cost of steel, they were suitably protected by the grant of bounties or protective duties according to their requirements.

But, contrary to the expectations of the Tariff Board, the Continental exchanges continued to depreciate while the exchange value of the rupee moved in the opposite direction. Thus the price of continental steel as measured in terms of Indian currency began to fall, so that the effects of protective duties began to be nullified to a corresponding extent. The matter was again referred to the Tariff Board, who expressed the opinion that a case for further protection had been established, and recommended the enhancement of import duties. The Government, on the other hand, in order to avoid a rise

in the price of steel and steel products in the country, proposed further bounties. The proposals of the Government were put before the Legislature in 1925, and a bounty of Rs. 20 per ton was granted on 70 per cent. of the steel produced in India between October 1, 1924 and September 30, 1925, provided that steel was convertible into articles already protected by the Act of 1924.

The Tariff Board, according to the provisions in the Act of 1924, again examined in 1926 the position of the steel industry. They recommended that the protective duties should continue in an altered form for a period of seven years, but that bounties should be discontinued. The Bill embodying these recommendations (which was put before the Legislature in 1927) was designed to introduce imperial preference through the backdoor. It proposed the imposition of basic and additional duties on steel and steel products entering India. The former was to be imposed on all steel, both British and non-British, while non-British products were to be subject to the latter also. Popular opinion, as expressed through elected members in the Legislative Assembly, was against this principle of differentiation in the fiscal treatment of the goods of British origin. But in vain. The Bill was passed in its original form, except that an illusory safeguard was inserted whereby the Government was enabled to increase the duty on British steel manufacture in cases of emergency in order to make protection more effective.

Iron and steel duties Act, 1934. The Act of 1927 was to remain in operation for seven years, so that in 1933 the Tariff Board was again commissioned to enquire into the condition of the steel industry. The Board found that the industry was no more in need of protection against British steel, but as continental steel was still being sold at uneconomic prices, Indian steel industry needed some protection from its unfair competition. They therefore recommended the adoption of free trade in relation to British steel, while in regard to continental steel they suggested the retention of import duties in a modified form. A Bill based on these recommendations was submitted to the Assembly in 1934 and was duly passed into

law. The Government was so much bent upon adopting the principle of free trade in relation to steel that it wanted to free the imports of British steel from the burden of even ordinary revenue duties to which almost every foreign article entering India was subject. But that would have involved losses to the revenues of the Government which it could not afford to bear. It was therefore provided that an excise duty of Rs. 4 per ton should be levied on all steel ingots produced in British India; and in order that the Indian steel industry may not suffer unduly in consequence of the operations of this excise duty, it was provided that all the steel products imported from abroad should be subject to a countervailing customs duty equivalent to the excise duty on steel ingots. "This countervailing duty will be additional to the protective duties (on steels of non-British origin) recommended by the Board and alternative to the ad valorem revenue duties on articles (of British origin) in respect of which protection has not been granted."* This socalled scheme of protection, which was to remain in operation till 1941, was accepted, in spite of all its viciousness and dangers, by a thoroughly subservient Legislature. Some idea of the viciousness of the principles underlying this scheme may be obtained from the fact that the whole of the countervailing customs duty is levied only on tested steels (which is synonymous with British steel), the excise duty is levied on ingots out of which both tested and untested steels are manufactured. This means that untested Tata steel will be subject to the same fiscal burden as the tested British steel, notwithstanding the fact that, as pointed out by Mr. Salter of Messrs. Balmer Lawrie and by various other steel selling concerns, there must be a difference of at least Rs. 10 per ton between the price of tested and untested steels in order to enable the latter to find a market. Thus by the operations of the excise duty on ingots the British tested steel will be brought directly in competition with the Indian untested steel with the result that the latter will be driven out of the market by he British product. However, in

^{*} Iron and Steel duties Bill: Statement of objects and reasons

actual practice the Tatas seem to have resorted to cutting down the price of their untested steel with a view to finding a market for it.

It is thus quite obvious that the whole scheme was designed with a view to protecting not the Indian steel industry but the imports of British steel into India as against the products of the Indian steel industry, and to help the British steel industry at the expense of the Tatas. This is abundantly proved by the fact that while the retention of customs duty (without any countervailing excise duty) would not have adversely affected imports from Britain by a single ton, the excise duty gave British steel additional scope in India which, the demand for steel in the country being limited, must obviously have been at the expense of Jamshedpur. In short, the Act of 1934, far from protecting the Indian steel industry, actually penalized it and gave a definite advantage to its British rival. And if further proofs in support of the contention that the Act of 1934 was designed to encourage British steel imports at the expense of the indigenous product is needed, we may mention the scandalous behaviour of the Government of India in submitting through the Secretary of State advance copies of the Report of the Tariff Board before its publication in India as well as copies of the draft Bill to the steel interests in Britain for their approval. Such consultations and approvals are without a parallel in the fiscal and industrial history of any other country in the world; but they have served one useful purpose; they have driven the last nail into the coffin of the pretence of our rulers that in their policy and actions they are always inspired by the interests of no one but Indians themselves.

Future of the steel industry. If the Tatas had not made the various initial mistakes in connection with the size of the plant and capital expenditure on extensions, we have no doubt whatever that they would not have been in need of protection to-day. On the other hand if protection had been initially granted for a longer period and on the condition that

the works should be so extended as to enable them to meet as far as possible all the requirements of the country in the matter of steel, the imports of steel would have very nearly ceased by now, for all the requisite conditions for the establishment of steel industry in India are fully satisfied. But this could not have been achieved without some definite plan : and the Government of India has never had any plan of economic development. Anyhow, whenever a plan of industrial reconstruction is formulated, the development of the steel industry would figure prominently, and there is no doubt that within a very short time the requirements of India in the matter of steel would be largely met from her own resources. But as the demand for certain varieties of steels (such as high speed steels) is too small in India at the present time and their manufacturing technique is more intricate and difficult, it would not be profitable to undertake their manufacture for a long time to come, unless the various industries using these steels are adequately developed at the same time, which would mean the adoption of a plan of all round industrial reconstruction.

(2) The coal-mining industry. In spite of recent developments in the field of hydro-electric power, coal is still by far the most important source of power for industrial and transport purposes. Again, the supplies of timber, and consequently charcoal, being limited, coal is still a factor of the greatest importance in the development of metallurgical and engineering industries. And lastly, coal is the source of chemicals of the greatest industrial and commercial importance whose names are legions. These facts show that, as a basis of modern industrialism, coal is next in importance only to from.

We have already seen in a previous chapter that coal is found in Bengal, Bihar and Orissa, Assam, Hyderabad, Central Provinces and the Punjab, and that the coalfields of Bengal and Bihar and Orissa are the richest in India. It has also been shown that the reserves of coal in India amount to only about 52,000 million tons. That these reserves compare very unfavourably with the reserves in other countries is shown by the fact that, to give a few instances, the United States have got

1,975,000 million tons in reserve, Germany 410,000 million tons, China 995,000 million tons, Canada 286,000 million tons, and Britain 190,000 million tons. But, strictly speaking, against these colossal reserves in foreign countries we can put only 10,000 million tons of India's first grade coal reserves, for it is only first grade coal in India that compares favourably with the average coal in Europe and America.

The exploitation of coal in India was seriously undertaken during the fifties of the last century. It was started by Europeans, and up to the present day 75 per cent of the coal produced in the country comes from European-managed mines. The production of coal at the present time averages nearly 20 million tons a year, and, with the exception of small quantities which are being imported into various port towns, the entire requirements of the country are met from indigenous sources. The pit-mouth price of coal in Bengal and Bihar and Orissa stands at nearly Rs. 5 per ton for first grade coal, Rs. 4 per ton for second grade coal and Rs. 3 per ton for third grade coal. This compares very favourably with 15s. or Rs. 10 per ton in Britain and Germany. This lower price is partly due to lower labour cost, partly to the more favourable position of coal seams and partly to the wasteful methods of production in vogue in all the coalfields in India.

Most of the coal produced in Bengal and Bihar and Orissa belongs to the superior grade because of the fact that the distances over which this coal has to be carried are enormous, and inferior coals cannot stand high transportation charges. When this inability of inferior coals to stand transportation charges is taken into account, the necessity of conserving coal becomes apparent. It is obvious that not more than 75 per cent of the coal in reserve can be extracted. On this basis only about 7,500 million tons of coal will be ultimately available. The consumption of coal cannot remain stationery at the present level of 20 million tons a year: when various industries are adequately developed the requirements of the country would not be less than 50 million tons a year—in fact they are likely to be a good deal more. But even on the basis of 50 million tons per annum the

reserves of first grade coal are not likely to last for more than 150 years, which is a very disquieting prospect. As regards coking coal, the reserves of 2,000 million tons would yield 1,500 million tons of coal. If India does not consume more than 3 million tons of steel annually (which in view of the present meagre requirements of the country is a very modest estimate), nearly 12 million tons of coking coal will be annually required for metallurgical purposes. Thus the reserves of coking coal will last for just about 120 years and no more-strictly on the assumption that the consumption of coking coal is confined to metallurgical industries only. But in spite of these limitations nothing is being done to conserve coal or to ensure its scientific exploitation. As scientific mining of coal is rather an expensive business, the colliery owners, in their anxiety to get the highest profits, are employing the most wasteful methods imaginable. The result is that millions of tons of coal are lost annually partly through inadequate extraction and partly through underground fires which are a common occurrence in Indian coalfields. Again, coking coal is at the present time being for non-metallurgical than for metallurgical used more The conclusion is obvious: if these wasteful tendencies remain unchecked, the reserves of first-grade and coking coal may not last for even a century. These dark prospects imperatively call for conscious economic planning not only in the coal-mining industry but in the entire industrial field. As it is not possible to enforce regulations with a view to bringing about the conservation of coal so long as the industry is in private hands, the only possible method of safeguarding the interests of coming generations would be the nationalization of the coal-mining industry. The very least, however, which the Covernment must do is to make the grant of mining licences subject to the adoption of the mining technique that is likely to lead to the avoidance of losses through human action or inacion. Again, the use of coking coal must be restricted to metallurgical industries (if it is at all possible to impose such restrictions without the nationalization or at least the cartellization of industry) and ordinary coal should be economized by

the establishment of central generating stations in the coalfields of Bengal and Bihar and Orissa, the necessity and prospects of which we propose to examine in the following chapter.

(3) Hydro-Electric power generation. Hydro-Electric power is a very effective substitute for coal as a source of heat and mechanical power; in fact it is more effective than coal as a source of heat and power for various industries, such as the industries of the electro-chemical and electro-metallurgical groups, in which the low cost of power is an essential condition of success.

Natural waterfalls are generally harnessed for the generation of electrical power all over the world, but in India such falls being few and often seasonal, water is stored in artificial lakes during the rainy season and artificial falls are created for the generation of power. As enormous areas of land must be acquired for lake sites, and masonry works must be constructed for holding large volumes of water, the cost of power in such cases is naturally high as compared with the cost of power from natural waterfalls. From this it follows that in India the cost of hydro-electric power can never be so low as in the countries where natural falls have been harnessed.

Up to 1018 nothing was known about the potentialities of India in the matter of water power. In that year, however, the Government of India acting on the recommendations of the Indian Industrial Commission undertook the hydro-electric survey of the country, as a result of which it was revealed for the first time that it was possible to develop hydro-electric power in India to the extent of more than 51/2 million kilowatts continuous, which is more than adequate to meet all the requirements of the country. But in spite of such enormous possibilities only about 500,000 kilowats have so far been actually developed. In Bombay the Tatas have been the pioneers and as a result of their enterprise nearly 160,000 killowatts have been developed in the western ghats, which meet a very large part of the industrial and non-industrial requirements of the city of Bombay. Again, nearly 33,000 kilowatts have been installed in the Madras Presidency (first

stage of the Pykara scheme) by the Madras Government, nearly 50,000 kilowatts in the Punjab (first stage of the Uhl river project) by the Punjab Government, and nearly 30,000 kilowatts in Mysore by the state Government. In addition to these a few small hydro-electric stations have also been set up in the United Provinces, Assam, Bengal, Kashmere and other parts of the country.

The necessity and importance of hydro-electric power development in India is amply realized when we take into account the fact that, the best and the most extensive coal deposits being confined to Bengal and Bihar and Orissa, the cost of coal in the various non-coal-bearing areas becomes prohibitive on account of high transportation charges. As cheap power is one of the essential conditions for the establishment of various manufacturing industries, the case for the development of water power in the non-coal-bearing areas is clearly established. But as manufacturing industries would not be established unless reasonably cheap power is already available, it is necessary that the development of water power should precede the establishment of various power-consuming industries. Clearly no private agency would undertake the installation of a hydro-electric power station when the demand for power has yet to be created. It is the State and State alone which can afford to run the works at a loss during the initial stages in order to encourage the development of industries. Moreover, a hydro-electric station serving an extensive area would automatically become a monopolistic concern with a tendency to charge the highest possible price for power, which would not be in the interests of the various dependent industries. It is thus the duty of the Government to undertake this task of water power development in an industrially backward country like India. The activities of the Punjab, Madras, Mysore and the United Provinces Governments in this field during recent years clearly show that provincial Covernments have at last awakened to the necessity of performing their duties in this field. But in the absence of a well thought out plan the state has gone in this direction thus far and no-further. As the developments in the

Punjab and Madras have not resulted in encouraging the establishment of industries, it is obvious that something more in addition to cheap power is needed. And it is not possible to find out and provide that "something more" without a plan of economic development.

(4) Non-ferrous metals. We have already seen in a preceding chapter that India is deficient in Copper, zinc, lead and tin ores. This deficiency is reflected in the production of these metals in India. Zinc and tin are not being smelted in India owing to the inadequacy of ore supplies, but copper is being smelted at Manbhandar in Orissa, while at Namtu in Burma lead is being produced. In 1932 the production of copper in Orissa amounted to only 4,443 tons, while in addition to this 9.729 tons of coppermatte (a kind of refined copper ore) containing nearly 44 per cent, copper were produced in Burma. But as at the close of the year 1932 the total ore reserves in Orissa amounted to only 700,466 short tons with an average assay value of 3.053 per cent. of copper, the smelting operations would automatically cease in 1936-unless, of course, some new workable deposits are discovered by that time. The production of lead in Burma amounted to 71,202 tons in 1932. The orereserves in Burma in that year amounted to 4,120,179 tons, which ought to ensure the continuation of smelting operations for about 15 years at the present rate of exploitation. But as Burma is going to be separated from India, lead-smelting would naturally cease to be scheduled as one of Indian industries after the separation. However, some idea of the magnitude and consequences of the deficiency in the production of non-ferrous metals may be had from the fact that during the pre-depression period the total imports of these metals averaged nearly Rs. 7 crores in value.4 This total is rather likely to increase when the various engineering industries are established in India. Aluminium is probably the only non-ferrous metals which can

^{*} In 1933-34 imports under this head amounted to nearly Rs. 4 crores in value but owing to the prevailing trade depression this figure cann t be accepted as indicating the normal requirements of the country.

be manufactured in India provided very cheap hydro-electric power is available. But notwithstanding the poverty of the country in the matter of non-ferrous metals as a whole the Government has done absolutely nothing to establish this industry; and without state assistance this highly technical and costly industry can never be established in a country like India.

Heavy Chemicals. There is no manufacturing 5. industry in which chemicals are not used at one stage or another. But in suite of the fact that a very large number of industries have been established in India, the country is still completely dependent on foreign countries for the supply of heavy chemicals except in the matter of sulphuric acid which, on account of the nature of this chemical, cannot be imported from abroad at a cheap rate, and which is being manufactured in a large number of small factories at various places in India. The fact that in spite of the trade depression the value of chemicals imported into India averages well above Rs. 21/4 crores, is suggestive and gives us some idea of the economic consequences of this deficiency. But the effects of this deficiency cannot be measured in money: they spread far and wide into every field of industrial activity. The markets of the world being divided by contracts and tacit understanding among a few powerful combines, competition is very much restricted in the case of heavy chemicals, so that the prices charged from Indian industrial establishments are more or less in the nature of monopoly prices which, in the absence of substitutes, pile up the cost of production and so damage their ability to face foreign competition. Again, they are entirely at the mercy of foreigners for the supply of chemicals, which are liable to be cut off in times of war. These facts give us an idea of the urgency of establishing the heavy chemical industry in India.

India on the whole is as well, or as badly, situated as any other country in the matter of facilities for the development of this industry. Coal, salt or brine, and various metalliferous minerals which are the chief raw materials (apart from sulphur) of this industry are obtainable in abundance. Again, the cost

of electricity for electro-chemical products is likely to be lower in India than in most of the countries in the world. Sulphur for the manufacture of sulphuric acid is not available (except in the form of gypsum in the Punjab), but then even the leading industrial countries like Britain and Germany suffer from this deficiency. There is no doubt whatever that the heavy chemical industry can be established on sound lines in India—provided technical knowledge and enterprise are forthcoming.

The necessary technical knowledge and enterprise are now going to be furnished by the Imperial Chemical Industries, Ltd. which is a British concern and which is the strongest chemical combine in the world. The Government of India have handed over to this combine on lease for a long term of years the Dundot area in the Punjab where salt, gypsum, limestone and coal are found in large quantities, and where, moreover, cheap electric power will be available from the Mandi hydro-electric mains. The handing over of this area to the strongest chemical combine in the world means that the manufacture of sulphuric acid (from gypsum), sodium carbonate, caustic soda, bleaching powders, chlorine, commercial hydrogen and other chemicals will fall into the hands of foreigners who are so well-equipped and strong that no Indian concern will ever have a chance of competing with them. So although heavy chemical industry is going to be started in India, the country will be as much under the heal of the foreigner as she ever was. Only her natural resources are going to be exploited and finished up in addition by the foreigner.

6. Engineering industries. Although the iron and steel industry has now been established on sound lines, there is no engineering industry of any kind worth reckoning in India. The so-called engineering establishments which have sprung up in Calcutta, Bombay, Cawnpore, Ahmedabad and other industrial centres are engaged in repair work only and as a rule do not manufacture any kind of machine units for the general market. Some European-managed concerns pretend to be manufacturing-engineers, but as they are engaged in the manufacture of various kinds of rough units only, and that too on a very small

and negligible scale, their activities do not entitle them to be described as manufacturing-engineers. The result of this deficiency is that on an average nearly Rs. 16 crores worth of machinery and mill work are being annually imported into India.

This dependence on foreign countries has another important consequence. The machinery imported into India is subject to transportation, insurance and other changes which on an average amount to nearly 20 per cent, of its value. It means that Indian manufacturing concerns have to start operations with a handicap of 20 per cent, on fixed capital charges, and have to provide for 20 per cent more in depreciation charges than the foreign countries. This is a handicap which cannot be lightly dismissed and which is to no mean extent responsible for the inability of Indian concerns to compete with their foreign rivals. If industries in India are ever to be established on a sound basis, it would be necessary to remove this handicap first. And it should not be at all difficult to establish this basic industry for ordinary carbon steel is already being manufactured in India, high speed steels can easily be manufactured (provided there is adequate demand for them), the cost of labour in the long run is likely to be much lower than in Europe and America, and there is already a very extensive and well-developed market for machinery within the country.

The establishment of other engineering industries will also be subject to the same rule. The imports of motor cars and cyles during the years 1926-27 to 1929-30 (the last four pre-depression years) averaged nearly 7 crores a year in value, while those of railway plant and rolling stock on both Government and private account averaged (up to 1927-28, after which they were discontinued on account of trade depression) nearly Rs. 8 crores a year. There is no doubt that a very substantial part of this demand can be met from India's own resources if steps are taken to establish these industries.

7. Vegetable oils. Vegetable oils are extensively employed in the manufacture of soaps, paints, varnishes and leather, and to a certain extent as lubricants. Oilcake, which is a by-

product of the vegetable oil industry, is extensively used as cattle food and as a manure. It is however, on account of the employment of various vegetable oils in manufacturing operations that this industry is regarded as belonging to the basic order.

There are numerous up-to-date oils mills in India which are meeting all the requirements of soap, leather and paint and varnish industries, and as India is the largest producer as well as exporter of almost all important varieties of oilseeds in the world, it would always be possible to meet all the requirements of various dependent industries in the country from indigenous sources. But the development of the vegetable oil industry has always to be studied from the point of view of meeting the requirements of foreign markets. At the present time more than a million tons of oilseeds are being exported from India annually, and it has often been suggested that these seeds should be exported in the form of oil and oilcake. Clearly this arrangement would not be practicable owing to the fact that the transportation charges for oil are much higher than for seeds. Besides, in almost every country while oil-seeds can be imported free of duty, vegetable oils are subject to heavy Export duties on oilseeds are sometimes import duties. suggested to enable India to convert all the into oil for foreign markets; but as India has by no means a monopoly of the production of oilseeds, these duties will ultimately fall upon the Indian cultivator, while import duties on oil will always be present in foreign countries to prevent the importation of oil and therefore the development of vegetable oil industry in India. The industry on the other hand may be developed if all the oil cake produced can be consumed in the country; but seeing that even now on an average nearly 300.000 tons of oilcake are being annually exported from India, the development of the industry through an increase in the demand for oilcake in India is a very remote possibility under present conditions.

8. Leather tanning. The leather tanning industry is scheduled as belonging to the basic order on account of the

fact that leather in one form or another is used in varying quantities in almost every manufacturing industry. Apart from the manufacture of shoes and other articles, which are not used for industrial purposes, we have to take into account transmission belting which is used in every factory, roller skins and leather bands for textile mills, and sheep skins for rice mills.

Roughly, three varieties of leather are being produced in India. Firstly, there is the product of village and town tanvards, where crude indigenous methods are employed. This branch of the industry has been discussed in some detail in connection with cottage industries. Secondly, there is the semifinished product of the tanneries in the Madras and Bombay Presidencies where improved methods of tanning are employed. The products of these tanneties are exported almost entirely to Europe and America where they are turned into finished leather. On an average nearly 20,000 tons of this half-finished leather valued at nearly Rs. 8 crores are annually exported. Thirdly, there is the finished product of highly-equipped modern tanneries which have been established at Cawnpore, Calcutta, Bombay, Madras, Bangalore, Agra and other places. This leather is manufactured almost entirely for the Indian market, and is used in the production of shoes and other non-industrial articles. The quality of the products of these tanneries varies; but on the whole it may be said that even their best products compare unfavourably with the mediumgrade products of European and American tanneries. This inferiority is due to a number of causes. In the first place the technique is comparatively poor, and as far as our information goes, the manufacturers do not improve their technique as there is little demand for high-grade leather in India. And secondly as Indian hides are generally obtained not from slaughtered animals but from the cattle that die a natural death after a toilsome life, they compare extremely unfavourably with foreign hides so that it is more difficult and expensive to turn them into really good leather. However, in spite of all these weaknesses in the organization of the leather tanning industry we find that the country is more or less self-sufficient in the matter of leather. Imports of leather and shoes average nearly Rs. 50 lakhs and Rs. 60 lakhs respectively in value, which will continue so long as we have in our midst foreigners and Indians who would always buy foreign-manufactured foot-wear regardless of the quality of Indian products.

But strangely enough India is far from self-sufficient in the matter of industrial leathers. While no data regarding the imports of roller skins, picker bands, and sheep skins are available, the imports of transmission belting average Rs. 85 lakhs in value, and the total imports under all these heads must be, considering the extensive requirements of Indian mills, exceeding Rs. 1½ crores in value. During the war, when the supplies of these leathers were no longer available from foreign countries. their manufacture was undertaken in India, but with the restoration of normal conditions after the war these industries gradually languished, and now only small quantities of low grade leather belting are being manufactured. The backwardness of these branches of the industry is due to the fact that Indian raw hides and sheep skins are not so suitable as foreign products, and that the manufacture of leather belting is a highly technical and difficult art which becomes all the more difficult when the manufacturer's choice is restricted to low-grade materials. Research work would undoubtedly solve all these difficulties. but little is being done in this direction by the Government and private institutions.

We have now to see how far it is possible to extend the activities of modern tanneries. The object of these development may be twofold: to displace the crude products of indigenous tanyards and to enable India to export finished leather instead of raw hides and skins. As regards the first object although the product of village tanneries is crude and less durable, and consequently wasteful of national resources (on an average nearly half the hides and skins could be saved if they were used after being properly tanned by modern methods) it is not possible to displace the local tanner so long as the purchasing power of the masses is not substantially improved. As regards exporting finished leather instead of raw hide and skins

(which average nearly 55,000 tons a year valued at nearly Rs. 8 crores), it may be said that, as in the case of oils and oilseeds, while raw hides and skins are allowed to enter the various European countries and the United States free of duty, the imports of finished leather are subject to import duties. Besides, the Western countries demand high quality leather, which Indian tanneries may find rather difficult to produce. But there is nothing to prevent India from marketing all her raw hides and skins in the form of half-finished leather. By these means at least a part of the manufacturers' profits and wages of labour would be retained in the country. That is the least, and also probably the most, which can be done in the direction of developing the leather tanning industry in India with a view to meeting the requirements of foreign markets.

A review of the present position and prospects of basic industries. From what we have said in connection with various basic industries in the preceding pages a good idea can be formed of the disparity between actual achievements and prospects in this field of industrial activity. Although the conditions for the development of every important basic industry in India are extremely favourable, the country is, except in the matter of coal and vegetable oils, dependent to varying extent upon foreign countries for the supply of basic manufactures. The engineering and chemical industries are still unknown; the manufacture of even those non-ferrous metals whose ores are found in India has not yet been taken in hand; the production of industrial leathers has not yet been seriously started; the local output of steel can meet less than half the normal requirements of the country. And the consequences of this great deficiency are that not only has the Indian manufacturer to pay on an average nearly 20 per cent, more for these imported products than his foreign rival, but in times of war his supplies are actually cut off. However, the ultimate result of these deficiencies is that apart from the uncertainties of supplies, Indian manufacturing industries are not in a position to compete with their foreign rivals as effectively as they would otherwise be able to do.

The apathy of the Government towards the development of industries in general and the absence of a plan for the attainment of that goal are the prime causes of this deficiency. Obviously enough, owing to their indispensability, the development of basic industries will occupy the first place in the plan of industrial development whenever the development of manufacturing industries is seriously contemplated in India; for so long as the basic industries are not established on sound lines the development of industries in general will be like building a superstructure without any foundations whatever.

CHAPTER XIII.

ORGANIZED INDUSTRIES (Continued).

Non-Basic Industries.

1. The Cotton-mill Industry. We have seen how the more highly developed sections of the cotton spinning and weaving industry in India were destroyed by foreign competition and by the unfriendly policy of our new rulers. India had been the cradle and home of the cotton industry, and it had enjoyed that position owing to certain advantages; and those advantages were still there to enable her to re-capture her lost pre-eminence. India was the largest producer of raw cotton in the world; the demand for cotton textiles within the country was enormous; there was plenty of cheap labour available; and all these advantages no other country in the world enjoyed to the same extent. The development of the industry on modern lines was thus only a question of time.

The great possibilities of the industry in India were realized by English adventurers, as we find that the first cotton mill was started in 1818 in Calcutta by Englishmen with English capital. The venture failed, and it fell to the lot of Indians themselves to demonstrate the possibilities of the industry. In 1865 the first Indian mill was started by a Parsi gentleman in Bombay. The success of this attempt was assured from the very start owing to the fact that Bombay was a great raw cotton market, that the climate of Bombay was more suitable for the manufacture of yarn, and that the island of Bombay could more easily command internal as well as foreign markets. The success of the pioneer concern paved the way for the establishment of more mills which followed in rapid succession. The Government viewed these developments with indifference, in fact with actual hostility during the later stages (about which more will be said presently), but in spite of this attitude of the Government the progress of the cotton mill

industry was rapid and more or less uninterrupted. In 1931-32, the latest year for which statistics are available, there were 331 mills in India employing on an average nearly 4 lakhs of hands. Of these there were 183 mills in the Bombay Presidency (including 3 in Bombay States), and the rest in other parts of the country. Production during that year amounted to 966,406,632 lbs. of yarn, 2,989,891,101 yards or 672,256,961 lbs. of cloth, and 1,454,003 dozens of hosicry pieces.

During the early stages and up to the beginning of the present century Indian mills confined their attention to the production of coarser yarn and cloth. But as a result of the Swadeshi movement, which started for the first time during the early years of the present century, the production of finer varn and cloth was taken up; but even now while more than 60 per cent. of the yarn produced in the country is of 1-20 counts, only about 2 per cent. is accounted for by counts above 40 and about 8 per cent, by 31--40 counts. Although the movement towards the manufacture of finer yarn started after 1905, the greater part of the progress in this field was made after 1932-23 as a result of the stimulus given by political awakening in the country. This is amply proved by the fact that in 1922-23, when the production of yarn amounted to 705,894-000 lbs., only 0.35 per cent. of the total production belonged to counts above 40, and about 2.25 per cent. to 31-40 counts.

Why progress in this field has been so slow and why even now Indian mills are confining their attention mainly to lower counts is due to a number of causes. In the first place there was the bugbear of Lancashire competition which had a paralysing effect on Indian mill-owners. The fear of that competition is still there—only the appearance of Japan during recent years has made it less fearsome. Why the Indian mill-owners cannot face this foreign competition brings us to other causes. In the first place Indian labour, unused as it is to handling finer materials, is not so efficient in the higher branches of the industry as the Lancashire and Japanese labour. Being primarily an agriculturist, the Indian labourer does not (and

cannot without completely severing its connection with agriculture) develop that delicacy of touch which is essential in the handling of finer yarns. For this state of affairs the manufacturer is himself to blame: he has done nothing to improve the moral and material condition of his workmen, with the result that they regard their connection with the industry as a necessary evil, and always avail themselves of every possible opportunity of taking themselves away from the scene of their physical and moral degradation. However, we propose to discuss this matter in greater detail in the chapter on labour. The inadequacy of the supplies of American long-stapled cotton (which is used in the manufacture of finer varns) from indigenous sources has also been to a certain extent responsible for arresting the growth of the higher branches of the industry. Until comparatively recently long-stapled American cotton was not produced in India, and even now production in the country is so small as to necessitate the import of nearly 70,000 tons of long-stapled American and Egyptian cotton annually. must be admitted that this handican is more imaginary than real, seeing that both Lancashire and Japan are entirely dependent on foreign countries (including India) for the supplies of raw cotton of all descriptions; but as the Indian manufacturer has never lost an opportunity of referring to this disability in his appeals for sympathy, we must not lose sight of its psychological effects. In any case, this handicap is not likely to last for long, as the Sukkur Barrage Scheme has already been completed and, Sind being one of the most suitable areas for the cultivation of American cotton, with a little organization and effort all possible requirements of Indian mills should be met from the country's own resources at no distant date. The excise duty on yarn of finer counts produced in India, which was not finally removed till 1926, also played an important part in arresting the growth of the manufacture of yarn of finer counts.

But in spite of all these various handicaps and disabilities the cotton mill industry occupies the foremost place among the manufacturing industries of India, and from the point of view of national economy is second only to agriculture in importance. This position the industry has attained in spite of the unfriendly attitude of the Government towards it. During the early nineties of the last century the Government was in need of funds to meet its soaring expenditure, and the cotton-mill industry was the victim of those financial exigencies. The Tariff Act of 1804 imposed a duty of 5 per cent, on all imported cotton yarns and fabrics, but in order to offset the protective effects of these customs duties a countervailing excise duty of 5 per cent, was imposed on all varus above 20's produced in India. Naturally as a result of these excise duties the Indian manufacturers found it more profitable to confine their attention as far as possible to the manufacture of varns up to 20's which were duty-free. The fact that up to the present day nearly 60 per cent, of yarn produced in India belongs to this class seems to be in part a legacy of these excise duties. However, to continue the narrative, in 1896 the Government under pressure from Lancashire removed the duty on yarn and reduced the duty on imported and Indian cotton fabrics to 31/2 per cent. During the war the import duty was increased to 71/2 per cent., and in 1921 it was again increased to 11 per cent, the excise duty remaining unaltered at 3½ per cent. The excise duty was finally abolished in 1926.

From the beginning of its career the cotton-mill industry had been to a considerable extent dependent upon the Chinese and other markets, so that a bulk of the yarn produced in India was exported. But during the war the industry lost all its foreign markets. This loss was partly due to the competition of Japan (where the industry has made rapid progress during this period) in Eastern markets and partly to the increase in the domestic demand owing to the decrease in imports from Lancashire. But new markets for both piecegoods and yarn have since been developed in Mesopotamia, Palestine, Arabia, East Africa and other countries, and in 1931-32 nearly 105 million yards of cloth valued at Rs. 354 lakhs and 22 million pounds of yarn valued at Rs. 128 lakhs were exported to these countries.

But in spite of the loss of foreign markets the industry experienced unprecedented prosperity between 1917 and 1922, and dividends during certain years in the case of some mills amounted to as much as over 80 per cent. But after 1922 started a slow and steady decline, and by 1926 the industry, at any rate in Bombay, found itself in a hopelessly depressed condition. This depression led to a demand for reduction in wages, which led to a series of strikes. It was in these circumstances that the Tariff Board inquiry of 1926 took place.

The Board found that there was some degree of unfair competition from Japan with its longer hours of work and employment of female labour to more than legitimate extent. The remedy suggested by the Tariff Board was that the mills should undertake the production of greater varieties of cloth, and in order to enable Indian mills to compete with Japan and other countries they recommended that a bounty should be given for the spinning of higher counts. But nothing came out of these proposals. The position of the industry became from bad to worse with the passage of time-till in 1931 the import duty on cotton piecegoods was increased from 11 per cent. to 20 per cent. with a 5 per cent. rebate on those Lancashire goods which did not compete with Indian products. The supplementary budget of September 1931 imposed a surcharge of 25 per cent, on all cotton piecegoods imported into India. The object of increase in import duty from 11 to 20 per cent, was, as explained by the Commerce Member on that occasion in the Assembly "not the development of the industry but its preservation,"* or the provision of a shelter behind which the industry could reorganize itself. Commerce Member also made it clear that the Government did not expect the mills to extend their activities into new fields such as the production of finer yarn or the weaving of superior quality goods.

^{*} See Indian Finance Year Book 1933, p. 219.

But hopelessly mismanaged as the industry in Bombay was (and it is the Bombay mills that were crying for protection and not the up-country mills), it is doubtful if this small increase in duties could have brought any relief. But luckily for the mills in Bombay, the Civil disobedience movement of those years covered the gap to a very large extent. As a result of this movement not only were the mills in Bombav able to keep their heads above water, but at Ahmedahad and further north actually a number of new mills were set up. As a result of these developments the production of yarn and cloth in India has, as we have seen, steadily increased in spite of the great depression. This progress has been made principally at the expense of imports from Lancashire; but these gains had to be shared with Japan whose piecegoods exports to India have increased enormously during recent years. In 1928-29 imports of piecegoods into India amounted to 1936 million yards valued at nearly Rs. 57 crores, while in 1931-32 these imports had come down to 775 million yards and were valued at only about 16 crores. The Japanese competition has become more and more formidable with the downward movement of the Japanese currency. It hit the mills in Bombay, which are the least efficient in India, more severely than the mills in other parts of the country, and the appeals of Bombay to the Tariff Board have been based on the depreciation of the yen, and when, therefore, the yen depreciated further in 1932, the mills in Bombay cried louder for assistance. As a result the Tariff Board was again commissioned in that year to make inquiries, and as a result of its recommendations on August 30, 1932 a Resolution of the Government of India was published increasing the ad valorem duty on cotton piece-goods, of non-British origin, to 50 per cent., subject to a minimum specific duty of 51/4 annas per lb. on plain grey piece-goods. But at the time these enhanced duties were imposed, the Tariff Board's data on which these new duties were based had already become obsolete owing to further depreciation of the yen. So naturally the Bombay industry cried for more help. From April 1, 1933, the import duty on piece-goods of non-British

origin was increased from 50 to 75 per cent. with a minimum of 6½ annas per lb. on plain grey piece-goods.

Indo-Japanese and Indo-British Textile Agreements. The immediate result of this increase in duties was that, as a retaliatory measure, the Japanese cotton-mill owners threatened to boycott Indian raw cotton. The upshot of these developments was the conclusion of the Indo-Japanese textile agreement. According to this agreement the customs duties to be imposed by India on Japanese piece-goods were not to exceed 50 per cent. ad valorem or 5 annas per pound on plain greys, while on other sorts it was to be 50 per cent. ad valorem. The agreement limited the export of Japanese piece-goods to Judia in relation to the quantity of Indian raw cotton taken by Japan in any single year. An claborate schedule was drawn up whereby the basic quota of piece-goods to be imported from Japan into India was fixed at 325,000,000 yards per annum, while in return for this concession the Japanese agreed to take 1,000,000 bales of cotton from India. The schedule provided for an increase or decrease in the imports of piece-goods into India in accordance with variations in the quantity of raw cotton taken by Japan from India, provided that imports into India should in no year exceed 400,000,000 yards. The basic principle underlying this agreement was the allotment of a fixed portion of Indian market to Japan while ensuring an outlet for Indian cotton. It is obvious that although the customs duty has been reduced, imports from Japan cannot do any serious harm to Indian mills. The agreement may be said to be satisfactory to all parties concerned in India, viz., the Indian manufacturer, cultivator and consumer.

The Indo-British textile agreement, on the other hand, is far from favourable to India. This agreement was the sequel to the conferences between the representatives of Bombay and British cotton textile industries which opened in Bombay in September, 1933. It was based on the assumption that the cotton textile industry in India is entitled to protection against imports from the United Kingdom and that the industry required heavier protection against imports from other foreign countries

(meaning thereby Japan) than against the United Kingdom. So far as cotton piece-goods are concerned, the agreement provided that when the revenue position of the country rendered it possible for the Government of India to remove the general surcharge on all imports, the Indian cotton-mill interests would not urge the Government to impose fresh duties on cotton piece-goods imported from the United Kingdom. As regards cotton yarn, it was agreed that, so far as imports from the United Kingdom are concerned, the duty may be 50 per cent. ad valorem with a minimum specific duty of 141/2 annas per Furthermore, the duties on artificial silk piecegoods were to be 30 per cent, ad valorem or 212 annas per square yard on fabrics without cotton mixture and 30 per cent. or 2 annas per square yard on fabrics with cotton mixture. In return for these concessions the British side agreed to extend marketing facilities to Indian textile manufacturers in foreign markets on the same lines as enjoyed by British manufacturers, and Lancashire undertook to encourage the use of Indian cotton in its mills. The value of these concessions may be gauged from the fact that Indian industry which is unable to compete against Lancashire in India itself without heavy protective duties would never be able to avail itself of the opportunities offered by shrewd Lancashire magnates in outside markets, while in regard to the purchase of Indian raw cotton Britain, unlike Japan, has only undertaken to popularize its use and not to purchase any definite quantity. This onesided agreement was obviously inspired by the auxiety of the Bombay mill-owners, or their representatives, to enlist the sympathies of Lancashire and the Government in their crusade against Japan whose competition they had found too formidable to face by ordinary means.

That the industry in Bombay has had its day is perfectly obvious. In its early days the island was certainly more suited for the cotton industry than any of the inland centres on account of its high atmospheric humidity, but now when methods of introducing and controlling humidity by scientific processes have been perfected, Bombay has lost this advantage.

On the other hand the island of Bombay has some definite disadvantages as a centre of the cotton mill industry. Firstly, being very congested, the cost of land is much higher in Rombay than at any of the inland centres. Secondly, local rates and taxes in Bombay are much higher than at smaller places. Thirdly, it is too far removed from the various inland trade centres. Fourthly, the cost of living is too high which necessitates higher wages; and lastly, the cost of power, water and raw cotton on the whole is on the higher side in Bombay. All these adverse factors pile up the cost of production, so that the products of Bombay mills are no longer able to hold their own in competition with the products of up country mills. ()n the other hand Bombay being one of the major ports of India, its mills are more suitably situated in connection with foreign markets; but seeing that the export trade in cloth and yarn has dwindled down to insignificant proportions, this advantage cannot justify the concentration of nearly two-fifths of the country's mills on the island.

But in spite of all these handicaps the mill-owners of Bombay have done nothing to improve their condition beyond clamouring for protective tariffs and more tariffs. The adoption of a more enlightened and honest policy in the matter of prompt wage-payment, establishment of co-operative stores and the provision of housing would have done much towards justifying a reduction in wages, which is a very important factor in the cost of production. But as it is, not only have they done nothing to remove any of these natural handicaps, but they have not done anything even to improve their organization which was the chief object of granting protection. The recapture of any substantial portion of the internal market seems to us to be out of the question, but there is no reason why after rejuvinating itself by means of re-organization the industry should not once again flourish by catering for the Near-Eastern. Middle-Eastern and East African markets in spite of keen Japanese competition.

That the cotton-mill industry in India as a whole has still got plenty of scope for expansion is shown by the fact that

now in spite of an unprecedented trade depression and heavy import duties nearly Rs. 20 crores worth of cotton piece-goods and yarn are being annually imported into the country. In fact seeing that there is a glut of labour in the country and that all the required quantities of various kinds of raw materials can be produced in India, these imports of one of the prime accessities of life can have no justification whatever.

2. The Woollen Industry. The shawls of Kashmere were, like Dacca muslins, prized all over the world, but curiously enough these shawls were made of imported and not indigenous The dependence of India on other countries for the supplies of high-grade wool continues up to the present day: in fact Indian sheep yield a sort of hair and not wool. But in spite of this deficiency quite a number of woollen mills have been set up all over India, the most important centres being Cawnpore, Dhariwal (Punjab) Bangalore and Bombay. In 1931 there were 18 mills in India, employing on an average 6386 hands daily. Almost all varieties of woollen fabrics are being manufactured by these mills, though it must be conceded that a majority of them are engaged in the manufacture of cheaper goods for the poorer classes. The pioneers in this field also have been Englishmen, and even now the European managed mills are the best and most up-to-date in the country. (If late, cheap Japanese woollen manufactures have made serious inroads into the Indian market and ousted the products of Indian mills. As a result a Tariff Board enquiry is proceeding at the moment with a view to examining the claims of the industry to protection.

Some idea of the immediate possibilities of the woollen industry may be obtained from the fact that during the last four normal years preceding the present trade depression the imports of woollen manufactures averaged nearly Rs. 4½ crores a year in value and in 1033-34 amounted to nearly Rs. 2½ crores. As in the case of foreign foot-wear, perhaps a greater part of these imports, meant as they are for Europeans resident in India and rich Indians, will continue in spite of all developments in the industry, but still quite a substantial

part of the demand for high-grade woollen goods can be met from indigenous sources if the industry is properly developed. India's dependence on foreign countries for the supplies of finer wool should not stand in the way of the development of the industry, for India's rivals (including Britain, Germany, France, Italy and Japan) are themselves to a very large extent dependent on Australia for the supplies of high-grade wool. Unfortunately, seeing that herds are small and herdsmen illiterate and ignorant, it does not appear to be a practical proposition to improve Indian sheep by cross breeding for a long time to come without intensive effort and up-to-date organization.

3. The Silk Industry. The development of the industry on modern lines began during the present century, and in 1931 there were 18 mills in India. Of these there were 2 in Madras, 5 in Bombay, 2 in Bengal, 7 in Mysore and 2 in But in spite of these imposing numbers the imports of silk manufactures, before the present trade depression set in, averaged nearly Rs. 31/2 crores a year in value. partly due to the fact that certain varieties of silk fabrics are not manufactured in India at all, and partly to the supposed or real inferiority of certain varieties of Indian manufactures. However, the silk industry of India is represented not by large factories but by the handicraftsmen of Murshidabad, Benares, Surat, Bhagalpur, Amritsar, Mhow and other centres which are responsible for meeting a greater part of the requirements of the country. But being luxury articles and the demand for certain varieties of fabrics being limited, it would not be possible to make India entirely self-sufficient in the matter of silk products for a long time to come. On the other hand a very substantial part of the 31/2 crores worth of silk products imported into India is competing against the goods manufactured in India, so that with proper organization this part of the demand can and ought to be met from within. That the industry at the present time is not very happily situated in the matter of raw material supplies is shown by the fact that during the last 4 normal years preceding the present trade

depression the imports of raw silk averaged nearly Rs. 1½ crores in value. As the raw silks of every country and locality vary in quality, it would not perhaps be possible to eliminate altogether the imports of raw silk; but as most of these imports consist of ordinary silks which can be cultivated in one part of India or another, a very substantial part of these imports can be eliminated with proper organization. Apart from the desirability of developing the natural resources of the country the requirements of the hard-pressed rural population demand the adoption of this course.

4. The Jute-mill Industry. Long before the spinning and weaving of jute by machinery was started at Dundee during the thirties of the last century, these processes were performed by hand in Bengal. It was only after the industry had been fairly wellcstablished at Dundee that the first spinning mill was started in 1855 near Serampur by an Englishman, which was followed two years later by the erection of a weaving factory at Baranagore. These ventures proved to be profitable, and other spinning and weaving mills were set up in quick succession. As a result of this development production outstripped demand, and profits in some cases went down to the vanishing point. It was in these circumstances that no new mills were set up during the ten years ending 1895. From that year onward there was again a steady expansion, and in 1914 there were 73 mills in the country. The jute-mill industry had been, till after the war, more or less completely neglected by Indians, so that it remained, and up to the present day remains, preponderatingly under European control.

During the war this industry, in common with other manufacturing industries, enjoyed exceptional prosperity on account of an insatiable demand for gunnybags and jute cloth for war purposes. Profits ranging between 50 and 150 per cent. per annum on the invested capital were realized, with the result that Indian investors now began to invest in jute mill shares. Thus by the end of the war more than half the jute mill shares were acquired by Indians. But as Indians have never had anything to do with the jute mill industry, its control remained

in European hands. After the war, encouraged by high profits during the post-war trade boom, new mills began to be set up again, and in 1931-32, the latest year for which official figures are available, there were 103 mills employing on an average 276,810 hands daily. Most of the mills which have been set up since the war are purely Indian concerns.

Some idea of the condition of the industry during the present trade depression may be had from the fact that in 1929-30 on an average 343,257 persons were employed daily in this industry as against 276,810 persons in 1931-32, and statistics issued by private agencies show that the number has gone down to the 200,000 mark during the past three years. A still more convincing test of the plight of the industry is provided by the fact that whereas in 1929-30 the mills in India consumed 6,424,000 bales of raw jute, in 1931-32 only 4,269,000 bales were consumed. These figures show that the mills have been working considerably below their maximum capacity. Even more significant are the figures relating to the exports of jute manufactures. In 1929-30 more than 522 million bags and nearly 1,651 million yards of jute cloth of the total value of Rs. 51,92,68,000 were exported from India, while in 1931-32 nearly 388 million bags and 1,021 million yards of cloth valued at Rs. 21,92,43,000 were exported. These figures show that while the quantity of bags and cloth together has declined by nearly 33 per cent, (on the assumption that 23/2 yards of cloth is required in the manufacture of each bag) their value has declined by nearly 60 per cent. The profits in these circumstances must have been cut to the bone.

The figures relating to the exports of raw jute give us an excellent idea of the possibilities of the further expansion of the jute-mill industry. In 1929-30 the exports of raw jute amounted to 806,884 tons, while in 1931-32 they amounted to 586,618 tons. It means that the quantities exported are not far short of the quantities consumed by Indian mills. The conclusion is obvious: in normal circumstances it should be possible to double the productive capacity of Indian mills. But almost all the great consumers of jute, such as France, Germany,

Italy and the United States, impose import duty on jute manufactures while raw jute is not subject to such duties. But seeing that India has a monopoly in the matter of jute production and that no effective substitute for jute is so far available, it may be possible to encourage the development of the jute industry by subjecting the exports of raw jute to an export duty. But then there are the interests of Dundee to be considered, so that such duties would never be countenanced by our rulers. Anyway, the possibilities of further expansion are there all the time, and would no doubt be utilized whenever India embarks upon the idea of industrial development.

5. Paper Manufacture. The manufacture of paper by hand flourished in many parts of India right up to about the middle of the last century, and even up to this day the industry is not completely dead. It was in 1870 that the first paper mill was set up near Calcutta. In 1882 the famous Titaghur Paper Mills were established. The success of this concern. though by no means glaring, paved the way for the establishment of mills at Lucknow, Poona, Bombay, Raniguni and in the Travancore State. Before the war these mills were far from prosperous on account of foreign competition, but during the war when the supplies of paper from foreign countries were not available in adequate quantities, they had ample opportunities of strengthening their position. The difficulties of the industry before the war were due mainly to the inadequacy of the local supplies of wood pulp on account of the absence of dense forest areas in those parts of the country where the mills were situated. Even now this deficiency has not been completely made up, seeing that large quantities of wood pulp are being imported, for which, however, no reliable and accurate data are available. In 1931 there were 9 paper mills in operation in India employing on an average 6,345 persons daily, production in that year totalled 40,558 tons of paper valued at Rs. 1,85,00,489. These figures were surpassed but once (in 1929) by a slight, almost negligible margin. At the present time Indian paper mills are manufacturing mainly medium-grade paper, so that the country is still dependent on foreign countries

for the supply of such products as superior art paper, newsprint, light and heavy wrapping paper, pasteboard, cardboard and others. Imports under these heads totalled 2,191,000 cwts. valued at Rs. 2,50 lakhs in 1931-32. These figures show that quantitatively only about one-third of the requirements of the country are being met from indigenous sources.

Indian paper mills were, until recently, using sabai grass and imported wood pulp as raw materials. But the supply of sabai grass varies from season to season so that without a thorough transport organization this material cannot be depended upon for large scale production, especially when the necessary transport organization is not forthcoming. However, some years ago the technique of pulp manufacture from bamboo was perfected, and the Indian Paper Pulp Company with its works at Naihati was established with a view to exploiting this process. The supplies of bamboos in Bengal and Southern India being practically unlimited, the introduction of the bamboo process appears to have changed the whole course of the paper manufacturing industry in India.

But the sabai grass paper industry has, as we have seen, its own peculiar difficulties in spite of the fact that this paper is in many respects superior to bamboo paper. And the bamboo paper industry is greatly handicapped by the high cost of production consequent upon certain technical difficulties which have still to be overcome. It was in consequence of these handicaps that the industry found itself in difficulties after the war which were aggravated by the deterioration of European currencies during the post-war period. The industry naturally claimed protection, and the Tariff Board recommended an import duty of one anna per pound on the various classes of paper competing with the products of Indian mills. It also recommended that a loan of Rs. 10 lakhs may be granted to the Indian Paper Company to enable it to test the possibilities of a new process on commercial scale. The Government accepted the recommendation of the Board in respect of protective duty (which was to remain in operation between April 1, 1925 and March 31, 1932), but rejected the proposal regarding a loan on the ground that the new processes being subject to patent rights, the loan would put the Naihati works in a privileged position. The protective duty was, after a Tariff Board enquiry, renewed again in March, 1932 for a period of seven years.

In forming an idea of the future prospects of this industry we must remember that the manufacture of paper is essentially a chemical process, in which large quantities of chemicals and heat producing agents are used. Indian mills being situated far off from the coalfields and there being no chemical industry in India, the industry is naturally working under a great handicap. In addition to this the mills using sabai grass are handicapped in the matter of transport facilities. When we take all these facts into account, we inevitably come to the conclusion that the future of the industry is linked up with the utilization of bamboo as a basic material. The supplies of this material are practically inexhaustible, so that it should be possible for India not only to meet all her own requirements, but also to export paper. But the demand for such varieties of paper as newsprint and superior art paper being limited and conditions for their manufacture being unfavourable perhaps for a long time to come, it would not be economical to undertake their manufacture in India at present.

6. The Cement Industry. The first cement factory was started in Madras in 1904, but its annual output amounted to cally a few hundred tons a year. It was in 1912-13 that some large companies were floated with works at Katni, Bandi, Hassan Abdal (Punjab) and Porbunder (Kathiawar) with an aggregate capacity of nearly 200,000 tons a year. These concerns flourished during the war, when foreign cement was not available and the demand for cement had greatly increased. It was in the face of these temptations that the post-war boom brought a number of new cement works into existence. At present there are 10 cement works scattered all over Southern, Central and Northern India, and the capital invested in this industry amounts to nearly 5 crores. The total output of

these factories in 1930 amounted to 564,000 tons, while their total capacity is said to be 972,000 tons.* As the imports of cement at the present time average nearly 80,000 tons a year, it follows that nearly 78 per cent. of the country's demand is being met from indigenous sources. The use of imported cement is confined to the various port towns which are situated too far away from the existing cement factories. A more sympathetic railway freight policy would enable the Indian factories to capture even this market, but while factories in the country are working under capacity, nothing is being done to restore to them their own legitimate markets.

The over-production of cement during the post-war years naturally resulted in a heavy fall in its price, which the cement manufactures attributed to foreign competition. In 1928 the Tariff Board examined the claims of the industry to protection. and its investigations led it to the conclusion that the plight of the industry was due to over-production and cut-throat competition, and as such they did not consider it entitled to protection. But the investigations of the Board were more useful to industry than protective tariffs would have ever been: they enabled the industry to put its house in order by a thorough reorganization, as a result of which it has become probably the best organized industry in India. Immediately the significance of the Tariff Board's findings was realized, eight out of the ten factories joined hands to form the Cement Marketing Board of India in order to regulate marketing operations and to assist them in an advisory capacity. It is mainly due to the activities of this Poard that the production of various new varieties of cements has been undertaken by the members concerned, and the factories, in spite of an unprecedented trade depression, have been able to declare from 5 to 121/2 per cent. dividends. It shows that the industry has now been developed on sound lines, and, practically unlimited raw materials being

^{*} In the absence of official data these figures have been taken from Indian Finance Year Book, 1933, p. 251

at its disposal, it should be able to meet all possible requirements of the country.

7. Glass Manufacture. The manufacture of glass by the fusion of sand and soda has been practised in India from the earliest times, but there is no evidence to show that the industry ever made much headway beyond the manufacture of crude bottles and bangles. In this primitive form the industry survives in many parts of India up to the present day; but the supplies of glass are now obtained by fusing broken glass articles and not directly from sand and soda.

It was in the nineties of the last century that modern glass factories began to be set up, but none of these early efforts succeeded. The failure in all these cases appears to have been due to the fact that the factories were set up too far away from the sand and coal deposits. Other factories came into existence during the early years of the present century, but from all accounts available it appears that the industry was in a bad way at the outbreak of the war. The war, however, gave a new lease of life to the industry, so that all the factories existing at the time made considerable profits. There are at present 14 large factories in India, out of which a good few (including the famous Naini and Ambala works) have been closed down on account of the Japanese competition. The Tariff Board examined, in 1931, the claims of the industry to protection, but its report has not so far been published. Meanwhile, factory after factory has stopped operations, and if some works are carrying on it is because they have somehow managed to do so on account of the protective effect of heavy railway freights from the ports to the far distant inland centres. The existing works confine their attention mainly to the manufacture of bottles, jars, lampware and other cheap articles of every day use. The Naini glass factory, which was the best equipped in India, had started the manufacture of sheet glass and various artistic products of the highest quality, thus proving that it is possible to manufacture from Indian materials and labour high class articles, but as we have stated

above, this factory has been compelled to close down on account of the Japanese competition.

We have seen in connection with the natural resources of India that the sand of the purest quality is found in the United Provinces, Rajputana and the Baroda State. It should thus be possible to meet a greater part of the requirements of the country in the matter of ordinary glass products from indigenous sources. The only weak link in the chain is the absence of indigenous supplies of soda ash which, however, is capable of being made up, and will be made up immediately the development of chemical industries is undertaken in India. Some idea of the possibilities of the industry may be obtained from the fact that the imports of glass and glassware during the ten years preceding the present trade depression averaged 2½ crores in value. By a proper handling of the situation at least 90 per cent. of the demand can be met from within the country.

The Match Industry. During the forty years ending 8. 1920 the manufacture of matches had attracted the attention of a number of small and ill-equipped concerns, but with the exception of two undertakings (one in Ahmedahad and the other in Calcutta), they all proved to be failures. Their failure was due to bad management, lack of technical knowledge. unsuitability of indigenous timbers and inadequacy of capital. But when in 1022 a customs duty of Rs. 1/8/- per gross was imposed on imported matches for revenue purposes, the industry began to be developed rapidly under its protective wing. But the Swedish Match Trust, which controlled nearly 80 per cent, of match production in the world and controlled the entire Indian market, could not allow this lucrative field to slip out of its hand; it began to set up factories at various "strategic points" all over the country. The result of these activities was that while almost all the requirements of India began to be met by local factories, the control of the industry and the market passed into the hands of the Swedish Trust with which the Indian producers could not compete. During subsequent years a large number of Indian-owned factories

were bought up by the Trust, and now more than half the matches used in India are the products of the various factories owned by the Trust. However, some idea of the progress of the industry may be had from the fact that in 1931 there were 51 match factories in India meeting more than 98 per cent. of the requirements of the country.

The industry is dependent mainly on imported timber for the manufacture of matches on account of the fact that suitable indigenous timber is not available in adequate quantities. And nothing has so far been done by the Forest Department to assure supplies. Obviously so long as the industry has to use foreign timber, it can never get on without the help of protective duties. In 1926 the Tariff Board inquired into the condition of the match industry, and recommended that the existing revenue duty should be converted into a protective duty for an unlimited period. But they could not see their way to imposing any restrictions on the activities of the Trust as they thought that its presence was conducive to efficiency. Thus while protection brought self-sufficiency to India in the matter of matches, that self-sufficiency was acquired at the cost of placing the control of the industry in the hands of foreigners. A more anti-national policy is difficult to imagine.

From the beginning of the financial year 1934-35 an excise duty of one rupee per gross boxes, each box containing not more than 40 matches has been imposed. How the industry has fared in consequence of this duty is too early to say but as a result of rise in price the consumption of matches must have gone down considerably.

9. The Sugar Industry. India has been the home of the sugar industry from the earliest times of which history has any record. The industry in Bengal was destroyed by the end of the 18th century, but in the various inland centres far off from the seaports it flourished till about the middle of the last century. But it seems that in the United Provinces it was never completely destroyed; for during the last quarter of the nineteenth century when the manufacture of sugar by

andigenous methods was thereatened with extinction, modern factories began to be set up at various places in the province. None of these factories appears to have flourished, and if they managed to continue it was more on account of the Swadeshi movement than because of their ability to compete with their foreign rivals. The industry was in a weak condition mainly owing to the high cost of sugarcane as compared with that in various other sugarcane producing countries, and this defect has not yet been completely removed.

Some idea of the economic importance of this industry may be had from the fact that during the eight years ending 1928-29 the imports of sugar into India averaged nearly Rs. 18 crores a year in value. Moreover, this is the only industry which (seeing that nearly two-thirds of the price of sugar is accounted for by the cost of sugarcane) affects the agriculturist fundamentally and directly. But in spite of its vast economic importance and notwithstanding the fact that India has always been the largest producer of sugar-cane in the world (there being on an average nearly 3 million acres under this crop in British India alone) nothing was done by the Government to encourage the development of this industry, and if it has come into existence it is more by accident than design. No doubt as far back as 1919 a Sugar Committee was appointed by the Government of India to examine the possibilities of the industry, but no action was taken on its report. At that time, however, the industry was attracting the attention of the Indian business community, which, in spite of Covernment's inaction in the matter, resulted in the flotation of a number of large companies, but some of them went into liquidation without even starting operations. Meanwhile revenue imported sugar went on increasing which, as in the case of the match industry, created a situation highly favourable to the development of the industry regardless of the attitude of the Government towards it. But of still greater importance were the developments in the realm of sugarcane cultivation that took place during the post-war period. The difficulties of the early pioneers were to a large extent due to the heavy cost of sugarcane consequent upon the small yield of cane per acre and the shorter duration of its life. These defects were eliminated to some extent when researches at Pusa, Coimbatore and other centres evolved new varieties of sugar-canes that were more suitable to Indian conditions than the unimproved indigenous varieties.

But without any protective measure the industry would have never made the progress it has made since 1931. The credit for taking the initiative in the matter must be given to the Imperial Council of Agricultural Research which, in 1930, made representations to the Government of India on the subject. As a result of these representations the Government referred the matter to the Tariff Board for inquiry. The Board found that the sugar industry satisfied all the conditions laid down by the Fiscal Commission in regard to raw materials, markets and ability to stand without the props of protective duties after a reasonable time, and that the industry had established its claim to protection. They therefore, recommended that in order to enable the industry to face initial difficulties a protective duty of Rs. 7/4/- per cwt. should be imposed for the first seven years and Rs. 6/4/- per cwt. for the next eight years. But as the Government thought that the period of 15 years, during which protective duties were to remain in operation, was too long, they proposed that protective duty of Rs. 7/4/- per Cwt. be imposed on all classes of sugar until March 31, 1938, and that a further inquiry be made before the end of that period. The Sugar Industry Protection Act based on these proposals received the assent of the Governor General on April 8, 1932. The duty however, was later on increased to Rs. 9/1/- per cwt.

The immediate result of the grant of protection to the industry was that sugar factories began to be set up with great rapidity all over the country--more particularly in the United Provinces and Bihar and Orissa which are the two chief sugar-growing provinces. No official data regarding the number of factories at the present time are available, but it must be fairly large seeing that by 1935-36 India is expected to become self-

sufficient in the matter of sugar.* To illustrate the progress the industry has made it may be mentioned that while in 1930-31 the imports of sugar amounted to 1,003,177 tons, valued at Rs. 10,96,47,000 in 1933-34 they amounted to only 262,000 tons valued at Rs. 2,70,29,000. Again in 1930-31 the production of various kinds of refined sugar in India amounted to only 151,650 tons; by 1932-33 it had increased to 645,000 tons, and the estimated yield for the year 1933-34 is 779,000 tons. Further it has been estimated that in 1935-36 the production will amount to 1,007,000 tons.† It means that, taking the normal consumption of refined sugar in India at 1,000,000 tons a year, by 1935-36 India will be meeting all her requirements from her own sources.

By the Finance Act of 1934 an excise duty of Re. 1/5/per cwt. was imposed. The Finance Member explained the implications of this duty in his budget speech by saying that "the present duty of Rs. 9/1/- per cwt. is Re. 1/13/- above the basic duty of Rs. 7/4/- recommended by the Tariff Board. In their report, however, the Tariff Board recommended that there should be power for Government to increase the measure of protection by 8 annas per cwt. when Java sugar was being imported at a price less than Rs. 4/- per maund to Calcutta. We propose to assume that the conditions justifying this extra margin of protection are likely to continue in existence for the present, and therefore we leave a protective margin of Rs. 7-12-0 per cwt., and to impose an excise duty of Rs. 1-5-0 per cwt." The excise duty was estimated to yield Rs. 1,47 lakhs, out of which an amount representing one anna per cwt. or about Rs. 7 lakhs was to be distributed among the various sugar producing provinces for the purpose of assisting the organization and operation of co-operative societies among the cane-

^{*} This estimate was offered by the Finance Member in his speech when introducing the 1934-35 budget.

[†] These estimates have been taken from the Indian Finance Year Book, 1934.

growers so as to help them in securing fair price, or for other purposes directed to the same end.*

When we take into account the fact that the Tariff Board had recommended the basic duty of Rs. 7/4/- per cwt., the imposition of an excise duty of Re. 1/5/- (when the duty with its surcharges actually amounted to Rs. 9/1/- per cwt.) does not appear to be capable of inflicting any undue hardship upon the sugar manufacturers, especially when the price of sugar has not receded more than 8 annas per cwt. beyond the figure on which the basic duty was originally based. This is proved by the fact that for the year 1934-35, during which the excise duty was in operation, the sugar mills all over the country have maintained fairly high dividends, amounting in some cases to nearly 20 per cent. On the other hand the financial results of the working of various concerns during 1933 showed that the Tariff Board had granted protection on a liberal scale so that a case for either the reduction of the duty or the imposition of an excise duty had been clearly established.

The consequences of the grant of protection on a liberal scale have been far-reaching. These high protective duties have resulted in a rapid development of the industry to the extent of making India self-sufficient in the matter of sugar. But they have also resulted in inefficient management and organization of the industry as a whole. Sugar factories have been set up in localities regardless of the possibilities of those areas, so that probably not more than half the concerns would ever be able to get on without protective duties. The Government has granted protection to the industry, but it has not laid down any conditions for the grant of protection. Some control over the affairs of the industry, in other words a plan for the development of the industry, would have saved the industry and the country from the difficulties which they now must inevitably face in the event of reduction or removal of protective duties—unless it is proposed to avert that disaster

^{*} See Times of India Year Book, 1934, p. 869.

by maintaining the present level of duties for all time, which would amount to subsidising incompetence and as such would be highly undesirable.

Other Manufacturing Industries. Apart from the industries which we have discussed above in some detail, there are a number of other industrial establishments which have come into existence during the past thirty years, and of these hosiery factories, steel trunk, lock and cutlery works, breweries, flour and rice mills, soap and paint works and turpentine and rosin factories are the most important. In 1932 there were 42 hosiery factories in India where large scale operations were carried on. But in spite of their imposing number they can meet only a fraction of the demand of the Indian market which appears to be dominated by the products of Japanese factories. The products of Indian factories are generally crude, and even in this line the Indian product is unable to compete with the Japanese articles. The industry is in a deplorable condition in spite of the fact that the imports of knitted wear from Japan are subject to an ad valorem import duty of 35 per cent. During the post-war period the imports of hosiery have averaged Rs. 1,14 lakhs a year in value, which gives us an idea of the extent of the market. Factories for the manufacture of steel trunks began to be established in the ninety's of the last century, and now they control the entire Indian market. Locks have been manufactured in India from the earliest times. and large machine-equipped factories have been set up during the last 30 years or so. But they are not able to meet all the demands of the country, as we find that the cheaper varieties are still being imported in large quantities. There are some large cuttery factories at Wazirahad, (Punjab), Aligarh, Bombay and Calcutta, but their activities are confined to the manufacture of cheap articles owing to the fact that Indian manufacturers have not yet mastered the difficult art of tempering. However, no reliable data regarding the number of these factories is available. As regards breweries and distilleries, in 1931 there were 26 such establishments in India, but they were all engaged in the manufacture of cheaper

varieties of liquor. In the same year there were 103 flour mills and 1508 rice mills in the country. The soap industry has been extensively developed, having its representative establishments in every large town; but with the exception of a few they are all engaged in the manufacture of washing soaps by indigenous process for local consumption. But apart from these concerns there were 13 large soap factories in India in 1931 manufacturing washing and toilet soaps by modern methods. Almost all these factories have been set up since the war. That the activities of these concerns have not seriously affected the demand for foreign soaps is shown by the fact that while during the pre-war period imports of soap averaged 314 cwts. a year, during the post-war period they have averaged 289 cwts. a year, and in spite of 35 per cent. ad valorem duty amounted to 296 cwts. in 1932-33 valued at Rs. 82,63,000. These figures show that the demand for soap in India has increased since the war, but they also show that in the case of semi-luxury articles like soap heavier duties are necessary if local production is to be encouraged. The case of paints and varnishes is also identical. It was in 1902 that the first paint factory was set up by Shalimar Paint Colour and Varnish Co. Ltd., near Calcutta, and since then eight more factories have been added to the list. These factories are manufacturing all sorts of paints, varnishes, enamels, distempers and dry colours. But prejudice dies hard; and it is partly due to prejudice that nearly Rs. 1 crore worth of paints are annually imported at the present time. But these imports are also partly due to the fact that the manufacture of certain high class distempers and enamels has not so far been undertaken in India. And lastly both the Punjab and the United Provinces have got a rosin and turpentine factory. As a very large number of industries use rosin and turpentine in manufacturing operations, these two factories are of very great importance from the industrial point of view.

The Present Condition of Manufacturing Industries Reviewed. In order to form an idea of industries in India as a whole we may now summarize what we have said in the fore-

going pages. To begin with, the most important basic industry of steel has been developed only to such an extent that less than half the requirements of the country are at the present time being met from indigenous sources. In the matter of coal the country is self-sufficing, and hydro-electric power has been developed both by the State and private agencies, but the extent of its development is still far behind the potentialities as well as the requirements of the country. The engineering industry is conspicuous by its absence, although all the raw materials are available and there is a large demand for all kinds of machinery in the country. Again none of the non-ferrous metals (excepting copper and lead) is being produced in India, although a good few can be easily manufactured in the country. The more important branches of the heavy chemical industry are totally absent, and Government concession to a British concern in the Punjab has put the monopoly for their development in the hands of foreigners for all time in the future. In spite of the fact that India is the largest producer and exporter of raw hides and skins in the world, she is still more or less completely dependent on foreign countries for the supply of all sorts of industrial leathers. Although small quantities of vegetable oils are being imported, as far as the various oil-using industries are concerned the country is more or less self sufficient. Taken all round it may be said that as far as the manufacture of basic articles is concerned, the country is still woefully deficient in spite of the fact that there is a large demand for these articles in the country and that all the conditions for the development of these industries are fully satisfied.

The non-basic industries are in a somewhat better condition, although some of them have been developed to the fullest possible extent. The cotton textile industry, inspite of its enormous possibilities, has not even been developed to such an extent as to make India self-sufficient in the matter of clothing material. And the same remarks are applicable to the silk and woollen textile industries. In the matter of jute manufactures India is self-sufficient; but no advantage has

been taken of the fact that India has got a monopoly in the matter of jute production, with the result that large quantities of raw jute are being exported. The glass industry is in a moribund condition in spite of its enormous potentialities and large demand for glass articles in the country. In the direction of paper manufacture little has so far been done to utilize the enormous supplies of raw materials that are available in the country. The cement, sugar and match industries are the only bright patches in the dark horizon, as we find that these industries have been developed or are about to be developed to such an extent as to make the country more or less completely independent of supplies from foreign countries.

Apart from the various industries mentioned above there are certain important industries to establish which no one has made an attempt even on paper, and these are the artificial silk or rayon industry, the manufacture of various non-basic engineering products such as motor cars, cycles, watches, clocks and others, celluloid manufacture, and other industries. There is a large demand for these articles in India, and moreover natural conditions for the manufacture of these articles in the country are as suitable as in any foreign country. However, not only these industries but also the present condition of various basic and non-basic industries shows that, as compared to her great potentialities, the development of manufacturing industries in India has hardly yet begun.

The Causes of Slow Progress. The causes of this slow progress are many and varied, but they may all be summed up in one phrase: the apathy of the Government. This great Himalayan obstacle has a number of off-shoots, and of these the absence of basic industries, lack of enterprise (which is sometimes described as the scarcity of capital), expensiveness of power, absence of technical knowledge and skill, anxiety of the Government to help British industry at all cost and consequently its unfriendly tariff policy and indifference towards various problems of labour and raw material supplies that have a direct hearing upon industrial development are the most

important. We have already discussed the consequences of the absence of basic industries, and as we have nothing to add to what we have said (except to reiterate the fact that this deficiency handicaps the various manufacturing industries by making them pay at least 20 per cent. more for these basic products than their foreign rivals, puts them at the mercy of foreigners in times of war, and exposes them to exploitation by foreign trusts), we do not propose to pursue the study of this subject any further. The other problems we propose to discuss in the next chapter in order to see how far the absence of a plan of industrial development and the apathy of the Government are responsible for the stagnation of industries in India.

CHAPTER XIV.

FACTORS IN INDUSTRIAL DEVELOPMENT.

I. Raw Materials.

The development of industries in relation to the supply of raw materials. For the development of manufacturing industries in a country it is by no means necessary that the supplies of various kinds of primary raw materials should be locally produced, although local supplies do go a long way towards helping industries. Even great industrial countries like Britain and Germany are by no means self-sufficient in the matter of the supply of raw materials for some of their great national industries: both import on a large scale such important raw materials for their basic industries as ironore and sulphur, and are also dependent in forcign countries for the supplies of wool, cotton, oilseeds, hides and skins and various non-ferrous metal ores.

India, as we have seen in connection with natural resources and agriculture, is decidedly more favourably situated than any of the European countries in the matter of the supply of raw material. Almost all kinds of agricultural, forest, animal and mineral products (with the exception of copper, zinc and tin ores) are either already obtainable or can be obtained in adequate quantities, provided production is scientifically organized. In regard to agricultural products, India's only deficiency at the present time is long-stapled cotton, but this deficiency is not due to any natural defect but is the outcome of the lethargy of man or the lack of systematic governmental action. Similarly, if the forests of India do not yield adequate quantities of suitable timber to meet the requirements of the match and other industries, it is not because natural conditions are unfavourable for the production of such timbers but because

the State has taken no steps to make the supplies available by adopting the system of plantations. Even in the field of animal products our deficiencies can be traced to inaction, or the inadequacy of action, on the part of the Government. For example it is perfectly possible to improve the quality of indigenous wool, provided the state takes determined and sustained action.

But it must not be supposed that the Government has done nothing to make up the deficiency in the matter of raw materials. During the last quarter of a century research work in agriculture has been organized, and cotton, sugar cane, jute, tobacco and other industrial crops have been greatly improved. Again, forests have been organized, and the Forest Research Institute at Dehra Dun has done valuable work in connection with Indian timbers and other forest products. In the realm of minerals the discovery and development of all our great resources is ultimately due to the efforts of the Geological Survey of India. Even in the field of animal products of industrial importance the Government has not been a passive spectator: a good deal of work has been done at various research centres to improve the quality of Indian livestock which would ultimately improve the quality and quantity of animal products available in the country. Improved methods of flaving have been introduced which have resulted in avoiding the waste of high-grade hides and skins. But all these activities have been far from adequate to meet the requirements of the situation, and unless more intensive and sustained action is taken in all the various fields, the supplies of raw materials of various kinds may not be developed according to the potentialities of the country for a long time. With each step forward in the organization of raw material supplies Indian industries would be in a more favourable position to compete with their foreign rivals than they are at the present time. These developments must take place directly in relation to the requirements of the various manufacturing industries, and as such should be a part of the general plan of industrial reconstruction.

II. Power Supply.

The importance of electricity as a source of heat and power. Wood or charcoal, mineral oil, coal and hydroelectric power are the main sources from which heat and power for industrial and transport purposes can be generated. But the requirements of modern industry and transport are so great that wood and mineral oil cannot be used as a source of heat and power on a large scale especially when their supplies are small and their cost high. Industry and transport have thus to depend mainly upon coal and hydro-electric power.

But with the perfection of the technique of converting mechanical energy into electric energy the direct use of coal in the factory and workshop is being rapidly abandoned: in every industrial country in the world industry and transport are being electrified, and the electrification programmes of various industrial nations give us the impression that the time when entire industry and transport would be electrified in those countries is not far distant. This move towards the electrification of industry and transport is mainly due to various economic and teachnical advantages which this change confers upon a country and its industries. The greatest technical advantage of using electricity as a source of heat and power is that by its application the efficiency of the plant is increased and, in the case of electro-chemical and electro-metallurgical industries, the manufacture of certain articles, which could not otherwise be produced, is rendered possible. Its chief economic advantages are that the total cost of power is considerably reduced (which results in a fall in the cost of production in those industries), the country as a whole gains because the consumption of fuel is reduced and, moreover, the utilization of waste coal in central generating stations is rendered possible. It is on account of these economic and technical advantages that transport and industry are rapidly being electrified in every industrial country in the world.

Means and methods of electrification. The electrification of industry in Europe and America may be said to have

started in the beginning of the present century. In the beginning natural water-falls were harnessed for the generation of electricity: then came artificial falls; and lastly the coal-fired central generating stations. In countries where water-power is abundant and coal scarce, hydro-electric stations are still being set up in the interests of industry and transport; but in countries like Germany, Britain and the United States where water-power is available only in limited quantities and there is superabundance of coal, central generating stations are being set up in the heart or neighbourhood of coal-fields and the whole country is electrified by what is technically known as the "grid system". By these means transport charges on coal are saved which, along with the economies consequent upon the production of power on a large scale, result in the production of power at a very cheap rate. Moreover, the valuable byeproducts of coal (from which a very large number of chemicals and mineral oils, which are of great industrial and commercial importance, are produced) are recovered, which would otherwise be lost.

Necessity of electrification of industry in India. But notwithstanding the fact that industrial establishments in all the various competing countries are being equipped with this more efficient source of power, very little has so far been done in this direction in India. In view of the fact that India has not got such plentiful resources of coal as various foreign countries have, the electrification of industry is more necessary in India than in Europe and America. As in order to compete with foreign countries Indian industries must be as efficiently equipped in the matter of power as those in foreign countries, India will never be able to develop all her industries to her fullest capacity unless this deficiency is somehow made up.

The peculiarities of the Indian problem. But the problem of electrification in India is somewhat different from the problem in other countries. The deposits of good coal being confined chiefly to western Bengal and Bihar and Orissa, the transport charges on coal from these provinces to far distant

centres increase the cost of coal to such an extent as to push up the cost of power to prohibitive levels. In fact the unindustrialized state of the Punjab. Madras and other provinces is to no mean extent due to the difficulties consequent upon the high cost of coal. However, the cost of power being an important factor in the total cost of production in various manufacturing industries, it is obvious that coal can be employed with advantage only within a certain area around the coal-fields, and that the greater the distance from the coal-fields the greater will be the disparity between the cost of power in those parts and in various foreign countries where the grid system has been and is being developed. The question naturally arises: must the industries in those areas, where the cost of coal and therefore power is much higher than in other countries, operate for all time under this heavy handicap? We have already seen that enormous quantities of water-power are awaiting development in India, and as most of this power is situated in the areas far off from the coal-bearing provinces, the industrial development in those parts will depend upon the harnessing of water power. We may thus divide India into two distinct zones: the coal zone where coal can be used for the generation of power, and the water-power zone where it would be cheaper to generate power from artificial water falls than from coal.

The water power zone. It has been shown in connection with basic industries that nearly $5\frac{1}{2}$ million kilowatts (continuous) are available for development and that so far only about 500,000 kilowatts have been developed. Even if we assume that not more than $2\frac{1}{2}$ million kilowatts can be actually developed, the amount of energy thus generated would, after meeting all the reasonable requirements of transport and electro-chemical and electro-metallurgical industries (which require very cheap power), be adequate enough to enable the areas covered by the water power zone to develop their manufacturing industries to about the same extent as they have been developed in Britain.

The coal zone. As both coal and iron are found close together in Bihar and Orissa it may be said that this province

is destined to become the "workshop of India". It is in this province that the iron and steel, heavy chemical, engineering and various allied industries will ultimately be established and nowhere else. But Bihar and Orissa will be able to realize that great destiny only if cheap electric power is available. In other words, the establishment of all important basic industries will depend upon the availability of cheap electric power, which can be developed only by setting up central generating stations in the coal-fields.

The state and power development. We have already seen that hydro-electric power would not be developed without state enterprise in this field. This conclusion is also applicable to the generation of electricity from coal on mass production lines. It may be mentioned in this connection that larger the size of the generating units, the lower is the cost of power generated; from which it follows that, as industries need cheap power, it would be necessary to set up large generating stations somewhere in the coalfields if the various manufacturing industries are ever going to be established in the coal zone. In other words, the development of electric power must precede or take place simultaneously with the development of industries as a whole, which means that power production will have to be a part of the general plan of industrial development whenever the problem of industrial development is seriously tackled. But after such a plan has been put into operation the state itself will have to undertake the task of power production on account of the fact that the power stations will have to work for a long time considerably below their capacity so that no private agency would consider it worth its while to undertake this task. Moreover, a power-supply undertaking will enjoy a monopoly in its area of supply, and a private undertaking may exploit this monopoly to the detriment of the various dependent industries. Anyhow, the necessity of state action in the field of power production is evident; and as power production without the development of various power consuming industries is unthinkable, the urgency of adopting a plan of industrial development manifests itself once again.

III. Finance and Management.

The importance and scope of the subject. factory system of production necessitates the employment of enormous amounts of capital on plant and machinery, buildings, raw materials and wages; and with the increase in the size of industrial undertakings during recent years with a view to realizing the economics of large scale production the capital requirements of industries have increased still further. From this it follows that unless very large amounts of capitals are available, a country cannot expect to develop its industries on modern lines. In these circumstances when we want to determine the possibilities of developing the manufacturing industries in India, we must first determine the amount of capital which is available in India at the present time and to see exactly what proportion of the existing capital resources of the country will be available for the development of industries without in any way damaging the interests of commerce and agriculture. If the requirements of industries are found to be much beyond the financial resources of the country, it will become necessary to see how this deficiency can be made up. But in order to be able to tackle these problems of the future it is necessary to prepare the ground by examining the existing system of financing industry and to trace the sources of capital already invested in the industries of the country.

The amount of capital invested in industries. The statistics of India are in such a hopelessly muddled condition that it is not possible to form an accurate estimate of the amount of capital which has been invested in industries. In the first place quite a large proportion of industrial establishments in the country are owned by individuals, and for the capital outlay on these no data are available. Again, the statistics of Joint Stock concerns carrying on manufacturing operations are mixed up with the Statistics of those which are engaged more in trading than in manufacturing operations. Then there are foreign joint stock companies which are carrying on operations in India but which are only the branches of

parent concerns abroad. The total paid up capital of these foreign concerns operating in India in 1931-32 amounted to over £200 million with nearly £100 million of debenture stock in addition. Obviously a small proportion of this enormous capital has been invested in India, but it is not possible to ascertain the exact amount. And lastly, even in the case of the companies registered in India a very considerable amount of capital belongs to non-Indians c.g. in the case of jute mills, engineering works, mining concerns and others. These few facts amply show how difficult it is to form an estimate of the amount of capital invested in industries in India and to trace the ownership of that capital.

But it is possible to make some rough sort of calculation. In 1931-32 the capital and debenture stock of the companies registered outside India amounted to a little over £300 million. Secing that with the exception of a few petroleum refining, engineering and metallurgical concerns foreign joint stock companies were not operating in any other field, not more than ten per cent. or £30 million could have been actually invested in industrial enterprises by foreign concerns in India. Again in that year the total amount of capital invested in rupee companies engaged in industrial operations amounted to a little over Rs. 160 crores. As large amounts of foreign capital have been invested in jute mills, mining and other companies registered in India, possibly the amount contributed by foreigners is not less than Rs. 50 crores, and may easily be more.* If we accept this basis of calculation it will transpire that at least Rs. 90 crores have been invested by non-Indians in India in various industries. As regards indigenous capital, seeing that quite substantial amounts shown against the capital resources of rupee companies have been invested in non-manufacturing operations, it may be taken as a fairly accurate estimate that only about Rs. 75 crores of the paid up capital of rupee companies has actually been invested in manufacturing operations. But in order to

^{*} For a more detailed treatment of the subject see "Indian Industry and its Problems" by H. R. Soni, Vol. I, Chapter IV.

form an estimate of the total amount of Indian capital invested in industrial enterprises we must also take into account the investments in industry by private concerns. Again no reliable data are available; but seeing that all kinds of privately-owned industrial establishments are found in almost every part of the country, not less than Rs. 10 crores could have been invested in them. This brings us to the conclusion that in all only about Rs. 175 crores have been invested in various industries in India and that out of this total nearly Rs. 90 crores belong to foreigners and the remaining 85 crores have been invested by Indians themselves.

Causes of the supremacy of foreign capital. above estimates are certainly conjectural, but as they are based on the relative importance of industries controlled by Indians and non-Indians, they cannot be far off the mark. Even if we add or subtract a few crores, they would always lead us to one startling conclusion: that foreign capital investments in the field of Indian industry are at least as important as investments by Indians themselves. This supremacy of foreign capital is even more evident in other fields of investment: commerce. banking, insurance, plantation, shipping etc. where nearly £350,000,000 has been invested by foreign capitalists as against nearly Rs. 300 crores invested by Indians. This supremacy is due to the fact that, armed with technical knowledge of all kinds as well as organization and spirit of enterprise, the foreigners (or the Britisher) has been the pioneer in many fields and has captured entire fields of economic activity; and he has been helped in these enterprises by the Indian Government in no uncertain manner. It was rather late in the day that Indian capital came into the field, and by the time it came, entire industries, such as jute, mining, plantation, shipping and others, had passed into the hands of foreigners, and, moreover, they had spread their activities far and wide into the fields of foreign trade, banking, insurance and what not. The truth of the matter is that until recently Indian capital was content to operate in only well-trodden fields-in other words it lacked initiative and enterprise. It was Mr. Jamshedji Tata who infused the spirit of enterprise into India, so that we owe a great deal more than steel works to that great pioneer and his illustrious descendants.

Amount of capital available for industrial development. In order to form an idea of the possibilities of developing industries through Indian enterprise it is necessary to form an estimate of the amount of capital that may be available for investment in the country. As a very large proportion of these investable funds are already in the hands of bankers. we may seek guidance from the statistics relating to banking deposits in India. In 1931 the deposits with the various banking institutions in India amounted to nearly Rs. 201,88,00,000. In that year the balance of deposits in the post office savings banks amounted to Rs. 38,20,00,000. This means that investable funds in 1931 amounted to Rs. 240,08,00,000. If we are to depend on these bank balances only, it is highly problematical if more than about Rs. 50 crores can be safely invested in industry without damaging the trade of the country. But, then, it may be argued that these bank deposits represent only a small part of funds in the hands of bankers owing to the fact that considerable amounts are deposited with shroffs and others. There is a great deal of truth in this contention; but seeing that these indigenous bankers are responsible for financing a very large part of the internal trade of the country, it would not be safe to mobilize any part of their holdings. In these circumstances not more than about Rs. 50 crores can be safely taken away from the banking institutions for investment in industry. But apart from bank deposits there are other sources of capital for financing industry which we have not so far taken into account. There are firstly, the coins lying in numerous large and small hoards all over the country. But seeing that the hoarder hoards his savings for emergencies and that he is generally illiterate and none too opulent, it is difficult how even the promise of high dividends would ever induce him to disgorge his coins for investment in industry. But at the same time it cannot be denied that there are still well-to-do people in all parts of the country who prefer to hoard their wealth than

to invest it in profitable pursuits. The hoarding habit of these people is partly due to their ignorance and illiteracy, partly to the absence of banking facilities in the localities where they live, and partly to the fact that frequent bank failures and the black record of joint stock enterprise have made them unwilling to part with their hoards even when high profits are assured. There is nothing to guide us in forming an estimate of the potentialities of this class of hoards; but seeing how inadequate the banking facilities in the country are and knowing that nearly 300 million people live in villages and small towns, the amount locked up in these hoards must be very considerable indeed.

But by far the most important source of capital is hoarded bullion. During the 50 years preceding 1931 (when gold began to be exported from India) more than Rs. 1200 crores worth of coin and bullion had been imported into India. To this we must add the annual output of Indian mines and large quantities of the metal already in the country. After allowing for wear and tear during this half century and after making allowance for the export of nearly Rs. 225 crores worth of gold between October 1931 and April, 1935, there must be at least Rs. 1500 crores worth of precious metals in the country. The very fact that people have no scruples to sell their gold when the transaction promises to be positable (as has been happening since 1931) shows that if industry in India is put on a sounder basis and the safety of capital and some profit on investments are assured, quite a substantial part of these hoards will be available for industrial development. The exports of gold have completely exploded the myth that the great hoards of bullion can never be brought out for investment purposes. All that is needed is that industry should offer safe and profitable investment to the capital belonging to an over-cautious people. If a profit of 25-35 per cent. has been sufficient to induce the hoarders to disgorge more than Rs. 225 crores worth of gold, considerably larger amounts should be available if industry can promise a steady return of say 8 or 10 per cent. on all investments. When we add to the potentialities of hoarded bullion

the potentialities of bank deposits and hoarded coin, it becomes clear that on a very conservative estimate more than Rs. 400 crores should be immediately available for industrial development. As far as we can see, this amount would be adequate to meet the initial demands of even a most extensive programme of industrial development.

The present difficulties of raising capital for industrial enterprises. But in spite of the fact that such enormous amounts of capital are lying idle in the country, it has always been very difficult to induce people to invest in industrial enterprises. This unwillingness of the people is wrongly attributed to the scarcity of capital in the country. The investor in India is unwilling to patronize the undertakings or industries which offer little hope of success, and on these promises we cannot build up the hypothesis that there is scarcity of capital in the country. It must be remembered that only those industries and undertakings complain of the scarcity of capital which either have not a very encouraging past record or do not offer any prospects for the future. The flotations in which the great pioneers like those belonging to the Tata family had a hand never experienced any difficulty in raising the requisite amounts of capital for their enterprises-notwithstanding the fact that the greatest of their achievements, the steel works, have not so far been an outstanding success. All that the Indian investor is anxious about is that the undertakings to which he subscribes are not the hunting ground of corrupt and incompetent adventurers, and in demanding this he is not any different from the investor in even more highly advanced countries in the world. Again, the investor in India is anxious to avoid only those industries which have not been able to make much headway in the past and have no great prospects for the future. To give an example, the sugar industry never attracted much capital until it was protected by the Government; but immediately protection was granted, capital began to pour in from all sides, mills began to be set up all over the country, and in less than five years after the grant of protection the

industry developed to such an extent that, as we have seen, the country became self-sufficing (or will become self-sufficing by 1936) in the matter of sugar. These facts inevitably lead us to the conclusions that (1) there is no scarcity of capital in the country, (2) that in order to make capital freely available the people responsible for new flotations must be men of proved ability and integrity so as to inspire the confidence of the investor, and (3) that industry must have assured future prospects. Until the last two conditions are satisfied, capital will continue to be scarce and so the pace of industrial progress will continue to be slow.

Defective Management and the Managing agency system. The management of industrial concerns in India at the present time falls into three main classes, viz. management by owners themselves in the case of private concerns; management by paid managing directors who are directly under the control of boards of directors; management by firms of managing agents. By studying the course of progress at Bombay, Ahmadabad. Cawnpore and other centres we come to the conclusion that management by owners themselves is the most efficient. In most cases the concerns were started by families who had made money in commerce, so that initially they were ignorant of all the intricacies of their new trade, but with the help of hired experts as well as hard work they seem to have more than made up the deficiency in almost every case. To-day perhaps the best managed concerns in the country are those in which an individual or a family has got preponderating financial interest. But such concerns are few as compared with the number of concerns belonging to the other two classes. Quite a large number of concerns are managed by an executive head, known as the managing director, who is appointed by the company's board of directors. These managing directors in a great majority of cases are the individuals who had taken an initiative in the flotation of the concern they manage and direct. They are salaried officials and their appointment is usually guaranteed for a term of years. As in India the successful flotation of a joint stock company is a matter of influence rather

than business aptitude or ability, it is not always the right individual who is at the head of affairs of a company. Often these people are incompetent, and more often they are corrupt in addition. The managing agency system in theory at least, should be more efficient than others, but in actual practice we find that it is hardly so-in fact it may easily go down into the depths of even greater degeneration. A firm of managing agents is usually a partnership of a few individuals who, initially at any rate, enjoy considerable confidence of the investing public usually because of their high social and financial standing. As a rule these firms are responsible for the flotation of the concerns which they afterwards manage. The period for which they undertake to manage these concerns are long, seldom extending to less than 20 years. Their remunerations are sometimes fixed, but more often in addition to their fixed remunerations they receive remuneration on output, or sales, or gross and net profits on the percentage basis. Manifestly such a system would have its advantages as well as disadvantages. The good points of this system are that by virtue of their high financial standing, the managing agents can make provision for the initial and working capital of the concern in their charge, which is often found difficult in other systems of managment. Again, as in the case of owner-managed concerns, they can avail themselves of the services of technical experts. Against ลบ endless these advantages we have to reckon of disadvantages which usually come in the the managing agency system. The first great disadvantage is that, their own remunerations being assured, incompetence and corruption usually creep into their management. because of the fact that the proprietorship of the managing agency itself is often inherited by men who are far from competent to work it efficiently, with the result that they carry this contagion of inefficiency into the affairs of the concerns they manage. Again, even when they are perfectly competent, the managing agents take so much in hand that they are unable to do justice to everything they handle, and this inefficiency is accentuated by the distribution of jobs among their own

kith and kin regardless of their ability and qualifications. Even unlawful and corrupt practices, which ultimately lead to huge losses to the concerns they manage, are not unknown. But the greatest difficulty is that no matter how recklessly they mismanage the affairs of their charges, they cannot be legally forced to retire till the expiry of the period contracted for.

From the above evidence we cannot but draw the conclusion that the management of industry as a whole in India is far from satisfactory at the present time. As a concrete proof in support of this contention we may mention the fact that even before the present trade depression less than half the manufacturing concerns were able to declare dividends which corresponded to or were higher than the ordinary rate of interest on the invested capital. That this state of affairs was mainly, if not wholly, due to bad management, is shown by the fact that while certain establishments in particular industries were showing profits, others were being run at a loss.

Remedies. If industry in India is ever to be put on a sound footing with a view to inspiring the confidence of the investor, drastic reforms in the system of management will have to be taken in hand. But unless state enterprise steps in as a sort of substitute, it would be advisable to mend rather than to end the present system. The most urgent requirement of the moment is that the law relating to the tenure of managing agents should be drastically altered so as to make it possible for a concern to severe its connection with its managing agents in the event of incompetence or negligence. As far as we can see Covernment cannot go beyond this limit in reforming the system except, perhaps, by tightening up the laws in relation to corrupt practices. If, on the other hand, Government helps industry directly or indirectly, it ought to consider itself entitled to direct its affairs. However, we shall discuss this interesting problem at greater length in the next section. But if the Government is not to interfere in the affairs of industry, something will have to be done to mobilize brains of the first calibre in the service of industry. At the present time such

men are monopolized by Government services and professions, so that means will have to be found to divert them to industry. This can be done only if the whole system of industrial management is made more progressive and industry is willing firstly to give these people a chance and secondly to give them as high remunerations as services and professions offer them. But, again, constituted as industry is at the present time and unwilling as the industrialist is to recognise the necessity of engaging high class men, it will be long before the necessary reforms take place in this field, unless the system of management itself undergoes equally drastic changes, which once again brings us back to the question of state intervention.

Methods of state intervention in finance and manage ment. It may be pointed out in this connection at the outset that the financing and management of industry go hand in hand, v.g. whosoever finances industry also controls it directly or indirectly. From this it follows that unless the state is willing to finance industry or to help it in other ways, it must not regard itself morally entitled to interfere in its internal affairs. The principles underlying state intervention in the case of direct participation and indirect assistance by means of protective tariffs, subsidies and various forms of concession are the same: in all these cases the tax payer or the community at large contributes directly or indirectly towards the development and maintenance of industries, so that it is always justified in exercising some sort of control over the affairs of the industries whom it grants assistance.

The various methods of state assistance to industry will be examined in the following section: at this stage we must confine our attention to the activities of the Government in the field of finance. It is evident that the ulimate goal of these activities would be to make capital available for the development of industries. Clearly the Government must begin by removing the causes of the so called scarcity. And, as we have just seen, capital for industrial development in India is not forthcoming in requisite amounts not because there is any actual scarcity but because the safety and

returns on that capital are very uncertain. In other words so long as industry is not in a position to offer certain and higher rewards to the investor, the present scarcity of capital will continue. The Government must begin with effective and convincing change in their policy. Obviously as all the various factors act and react upon one another, it would be necessary to tackle all the problems simultaneously, which once again brings us to the necessity of drawing up a comprehensive plan of industrial reconstruction. As far as the financial part of that plan is concerned we cannot visualize a better way of solving the problem than by setting up industrial banks on the Japanese model. These banks should be made responsible for providing initial and working capital for new as well as old industrial concerns. These banks with their vast resources can afford to employ technical experts who examine the possibilities of the schemes put before the banks. If a scheme is approved by these technical experts, the bank lends its financial support to that scheme, so that the very connection of an industrial bank with a scheme is considered by the investing public as a proof of its soundness. In all new industrial enterprises which are backed by these banks, the bankers themselves retain varying degrees of interest, so that their responsibility does not end with the successful flotation of a new concern. As holders of stock in those concerns, they are represented on their boards and are thus in a position to take part in their management. They thus play the triple role of partners, financiers and advisers to the industrial enterprises they come in contact with. In such industrial undertakings the efficiency of management is naturally assured, and equally naturally the prospect of this improvement stimulates the investor to action. The recommendations of the Industrial Finance Committee recently appointed by the United Provinces Government show that the trend of thought of our financiers and administrator is already in the direction of industrial banks.

The constitution of industrial banks. As the fate of industrial banks would be linked up with the fate of industries

themselves (which are not much in investor's favour at the moment) the very flotation of these banks would be almost impossible without the assistance of the State. That assistance the State can give (as has been recommended by the United Provinces Industrial Finance Committee) by guaranteeing a minimum return on the share capital, or by subscribing a part of capital, or preferably by adopting both the methods at once. By these means apart from ensuring the successful launching of the bank the Government would be in a position to direct and control the bank, and through the bank industry itself. The question at this stage arises: should these banks be of provincial or all-India character? Although constitutionally industrial development is a function of provincial governments and there is a tendency in every province to go its own way in economic matters, everything can be said against and nothing in favour of provincial enterprise in the field of industrial banking. To start with, it will be noticed that national economic planning and co-ordination of regional effort is impossible in a system of independent provincial control. Thus under this system duplication of activities with resultant overproduction in one field and the entire neglect of other activities of great national importance is bound to arise under separate provincial action: and this can be avoided only by the unification of control under the Central Government. Again, the success of industrial banks would hinge on the work of technical expert and the resources of provincial banks may be too meagre to allow of the employment of men of the first calibre; and if they are somehow employed, the ambitions of the provinces may result in needless duplication. And, lastly, in order to bring about the development of industries in the country with due care and despatch the industrial banks must have ample resources, and the provincial governments may not be in a position to meet these requirements without borrowing from the Central Government. When all these facts are taken into account it becomes obvious that only a central financing organization controlled by the Central Government itself can meet the vast requirements of Indian industry. Needless to add,

such a central organization may be established and worked on the model of the Reserve Bank of India with its branches not in various artificially created circles but in all the major provinces. The co-operation of central and provincial governments on the one hand and of all the provincial governments among themselves on the other would be necessary for the success of the scheme, and this cooperation can be brought about through the agency of a central industrial banking institution. In a nutshell, the industrial bank would be an agency through which the Government would translate its programme of industrial development into action. Again, it would be an agency which would mobilize all the capital resources of the community for the development of industry.

The employment of foreign capital, Rut successful development of industries in the country we must not depend too inuch upon efficient management alone: as will be shown in the following section, governmental action in a number of other spheres will be necessary, and if action in those fields is forthcoming simultaneously, we may confidently look forward to the dawn of an era of industrial prosperity. The safety of capital and certainty in regard to good return thereon is likely to induce many a hoarder of coin and bullion to invest his hoards in remunerative enterprises. It may thus be taken as fairly certain that all the requirements of industry in the matter of capital can be met from the country's own resources. But if for some reason the supply of capital lags behind the demand for it, it would always be possible for the government to make up the deficiency by borrowing funds abroad and investing them in industry through the agency of the industrial bank. The Government has in the past constructed railways and canals and waged wars with funds borrowed from foreign countries, and there is no reason why it should not resort to those means for developing industries also. It must be admitted that it is always better to employ indigenous capital as far as possible owing to various political and economic disadvantages that inevitably come in the trail of foreign loans; but political disadvantages apart,

it is always economically advantageous for a country to develop its resources by means of borrowed capital than not to develop them at all.

Disadvantages of the employment of foreign capital by foreigners themselves. But if on account of the scarcity of investable capital in the country foreign capital is to be employed, the least objectionable way would be to employ it through the agency of the people or the Government, as in that case the foreigner capitalist gets bare interest on his capital while the control of the industry in which it is employed remains in the hands of the borrowing nation. On the other hand the investment of capital in industry by foreigners themselves is, under certain conditions, full of danger to the economic well-being of the people and should be resisted at all cost. The most serious objection against this method of developing the industries of the country is that under this system profits necessarily leave the country so that the country gains only to the extent of the wages of labour of none too highly skilled variety. As profits leave the country its capital resources are not given a chance to develop, with the result that the further expansion of industry depends upon the tender mercies of the foreigner. Again if industries are allowed to be controlled by foreigners, the problem of unemployment among the educated classes far from being solved would become more acute. If proofs are needed in support of this contention, we would only mention the fact that ordinary salesmen and petty clerks are being imported in thousands by the foreign firms already operating in India; and it is difficult to see how they can be induced to adopt a more friendly attitude towards the people of the country on whose custom they are dependent for their livelihood. There are also political dangers to be reckoned in the case of a country like India inasmuch as foreign vested interests have always been the greatest opponents of India's political advancement.

Some supposed advantages. The question of the employment of torcign capital by foreigners themselves was examined by the Indian Fiscal Commission who gave their

blessings to this system by saying that "apart from the intrinsic benefits of increased supplies of capital, the foreigner who brings his capital to India supplies India with many things of which at her present stage she stands greatly in need. is on the whole the foreign capitalist who imports into the country the technical knowledge and the organization which are needed to give an impetus to industrial development. to him that we must look largely at first for the introduction of new industries and for instruction in the economics of mass By admitting foreign capital freely India admits production. the most up-to-date methods and the newest ideas, and the benefits by adopting those methods and assimilating those ideas. If she tried to exclude them, the policy of industrialization which we contemplate could with difficulty be brought to a really successful pitch. We hold, therefore, that from the economic point of view all the advantages which we anticipate from a policy of increased industrialization would be accentuated by the free utilization of foreign capital and foreign These recommendations were later on endorsed resources."* without any reservation by the External Capital Committee.

It is not difficult to detect obvious fallacies in these recommendations. To begin with, the assertion that it is "the foreign capitalist who imports into the country the technical knowledge and the organization which are needed to give an impetus to industrial development" is wholly wrong and misleading. Except in a few industries, such as fine chemical manufacture, technical knowledge has become a marketable commodity which anyone who has the requisite price to pay can buy. Were this not the case, whole nations would have been to-day without many industries employing highly scientific processes. In India itself industries based on highly technical processes (such as steel manufacture) have been established without the least intervention of foreign capital. Again, the Commission was wholly wrong in its assertions regarding the acquisition of technical knowledge by the people of India from foreigners carrying on manufacturing

[•] See Report, par. 289.

operations in this country. Anyone with ordinary common sense would hardly believe that these foreign concerns would willingly teach Indians their technique so that the latter might set up rival establishments in India. As regards the assertion that "we must look largely to foreign capitalist for the introduction of new industries and for instruction in the economies of mass production", the Commission ought to have known that the demand for the products of some of those industries in which mass production methods are applicable is limited, and that a single factory set up on these lines would not only be able to meet the entire requirements of the country to the complete exclusion of foreign articles but would actually have to find foreign markets for considerable amounts of surplus product. In these circumstances what useful purpose is going to be served by instructing Indians in the science of mass production? And finally the assertion that "by admitting foreign capital freely India admits the most up-to-date methods and the newest ideas. and she benefits by adopting those methods and assimilating those ideas" is altogether wrong and misleading inasmuch as it is based on the assumption that Indians as a race are incapable of producing new and original ideas. British industry had a start of nearly three-quarters of a century over its foreign rivals; but there is no evidence to show that any of the great industrial nations of modern times had to invite British capital and enterprise in order to be able to learn in a systematic manner the arts of manufacture. If other countries have progressed without surrendering the control of their industries to foreign capitalists and adventurers. India also can and must do the same.

Different degrees of disadvantages. But the disadvantages inherent in the system of foreign industrial enterprise in a country like India differ according to the nature of the industry. There are certain industries (such as aluminium and heavy chemical industries) which tend to be run on mass production lines. Once an establishment belonging to this class of industries is set up in the country by foreigners, there is no room left for indigenous enterprise. Such foreign monopolies should, if possible, never be allowed to come into existence. Again there

are certain industries (such as 'the manufacture of matches) which though not subject to mass production methods are yet being controlled by giant trusts in foreign countries. The resources of these trusts are so vast that once they are allowed to operate in a country local enterprise is, in the absence of some kind of state control and regulation of trade, completely eliminated. This case is as bad as the former one, so that the incursions of foreign capital in this field must be checked. Then there are some industries which are dependent upon exhaustible natural resources (such as minerals) of the country. When it can be established that such resources are likely to fall in the hands of foreigners to the entire exclusion of local enterprise and that the foreign monopoly thus established would result in the exploitation of the people, such enterprises should be discouraged even if those natural resources remain unused for a long time. And lastly there are ordinary industries in which neither a monopoly is established nor are the exhaustible natural resources exploited. The only objection against such industries is that they restrict the scope for indigenous enterprise and their profits leave the country.

Prevention or control? But it is not possible to prevent the foreigner from carrying on manufacturing operation in the country. It is not possible because a foreigner domiciled in India can, through partnership with foreign capitalists, start and control industrial enterprises in India. In some cases it is not even desirable because (in the case of ordinary competitive enterprises) the presence of the more efficient foreigner would always be a guarantee against slackness and incompetence among the Indian concerns. Our object in all circumstances should be to prevent the foreigner from acquiring complete control of entire industries and individual industrial enterprises. obviously be done if Indians are given an opportunity to take part in financing all the industrial enterprises that are launched for carrying on operations in India and by stipulating that more than half the directors of the concerns should be Indians. other words foreign capital can be prevented from controlling industries by compelling it to be invested in rupee companies

and under ultimate Indian control, though immediate technical control may, by virtue of their superior technical knowledge and organization, be vested in foreigners. This is the least and also possibly the best that can be done to prevent foreign capital from acquiring the control of manufacturing industries in India.

But so far the Government has done nothing in the matter; on the contrary it has been actually treating foreign capitalists more favourably by granting concessions, grants and technical assistance. The recent advent of Imperial Chemical Industries (which is a British trust) in the field of heavy chemical manufacture in the Punjab by the grant of valuable mining and other concessions is a case in point, and shows how far the Government is even now prepared to go towards helping foreign industristists against the interests of the country in general and of all manufacturing industries (which will henceforth be dependent on this trust for the supply of all sorts of chemicals) in particular. This is an excellent illustration of the present policy of the Government of India in relation to foreign capital investment.

The meaning and Scope of State action. Since the dawn of history state action has been an important factor in the development of industries in a country. In the Early and Middle ages it took the form of royal patronage in every civilized country. Then came the importation and settlement of foreign artisans under state protection for the introduction and development of new industries. This naturally led to the protection of infant industries by the imposition of protective and sometimes prohibitive duties. With the application of power and machinery to manufacturing processes and with the extension of markets consequent upon the mechanization of transport there ensued the scrambling for markets, and now we find that there is hardly any branch of industrial activity which does not necessitate State action in one form or other.

We have already seen that adequate supply of raw materials, cheap electrical power and capital are necessary factors in modern industrial development, and that these factors are in

a large measure themselves dependent upon State action in their respective spheres. It will be shown in the following chapter that the supply of the requisite quantities of suitable labour (which is another factor in industrial development) is likewise dependent to a large extent upon State action in various spheres. It shows that State action is a factor upon which other factors in industrial development are wholly or partly dependent. We need not again dwell upon the part which the State is expected to play in the provision of raw materials, power and capital. As regards labour, it will be shown in the next chapter that a constant supply of skilled and educated labour is necessary to enable industries to compete with their foreign rivals, and that the responsibility of educating labour and taking measures for maintaining its supply rests to a large extent upon the State. Again, in a country like India where technical knowledge is poor and enterprise scarce, it is the duty of the State to demonstrate the possibilities of various new industries by means of demonstration and pioneer factories. Research work is equally necessary to help the manufacturing industries firstly to start operations and secondly to enable them to improve their technique. As modern manufacturing operations necessitate production on a large scale, certain industries may find it necessary to rely upon foreign markets, so that in such circumstances State assistance in the field of developing foreign markets becomes necessary. Thus most of the activities of the State in the domain of industry are calculated to overcome the handicap of inexperience and to face the menance of unfair foreign competition (through the depreciation of foreign currencies, dumping and other factors). It most often begins with as well as finds its consummation in enabling the manufacturing industries to face foreign competition by the imposition of protective duties and the grant of bounties and subsidies.

Industrial Policy of the East India Company. We have seen that it was under the rule of the East India Company that all the great national industries of India declined and that nothing was done to re-establish any industry on modern lines except the iron and steel industry. The fact that the Company

was anxious to establish the basic industry of iron and steel does not suggest that it was trying to lay the foundations of industry in India on scientific lines: rather it proves that it was willing to assist only those industries which were either likely to be useful to Britain or those whose development was not likely to damage British interests, and only the iron and steel industry happened to satisfy that condition at the time. The Company thus planned its industrial policy solely in the interests of Britain and not of India. At the same time it did not place any positive obstacle in the way of the development of industries in India.

Laissez-faire policy under the Crown. The introduction of the direct rule of the Crown in 1858 did not herald the dawn of a new era for industries in India; on the other hand there is reason to believe that the change was followed by an actual set-back. But by the time the Crown took over the control of government, conditions in India had become more favourable for industrial development. The Western system of education had been introduced; the knowledge of chemical and physical sciences had been spreading; long continued peace and the expansion of foreign trade had brought about the accumulation of capital. The development of industries received further impetus from the construction of railways which was started during the second half of the nineteenth century as well as the establishment of the Department of Geological Survey which led to the discovery of important mineral deposits and thus helped to bring about the development of industries.

But the Government did not give any kind of direct assistance to industries. The education which it provided was of a purely literary type, and almost nothing was done to impart technical training. The railways, far from descriminating in favour of Indian manufactures, were actually discriminating against them and in favour of imported goods—indeed as they do up to the present day. Pioneering, demonstration and research, which are so essential in an industrially backward country, were unknown for a long time. And finally, as regards fiscal policy it may be said that not only was it never

regulated according to the needs of the newly-established industries but it was actually manipulated in favour of British manufactures in complete disregard of Government's own financial requirements. This indifference towards the development of industries continued right up to the end of the nineteenth century, and if some industries (such as cotton, jute, leather, and iron) were developed during this period, that progress was made in spite of Government's apathy.

Change in Government's attitude towards industrial development. The first attempt to help industries directly was made in Madras in 1898 when Mr. Alfred Chatterton succeeded in obtaining a small grant from the Madras Government to demonstrate the possibility of manufacturing aluminium utensils from imported metal. The experiment proved to be successful, and in 1900 the Secretary of State sanctioned the appointment of Mr. Chatterton for a period of three years in order to organize the various technical trades and industries in the Presidency. In the beginning of the present century some changes became noticeable in the policy of the Central Government also. In 1905 for the first time a separate Department of Commerce and Industry was created by the Government of India. But a set back was soon to come, so that these manifestations of change in the policy of the Central Government did not yield anything worth reckoning. Meanwhile the Madras Government was going ahead with its programme of industrial development which included such activities as the development of handloom weaving, chrome tanning, metal working, engineering and others. These initial successes of the Madras Government made the Government of the United Provinces sympathetic towards similar experiments, and it embarked upon a programme of its own in 1908. It began to grant loans and other forms of financial assistance with a generous hand; it assisted the sugar industry and set up a pioneer oil mill at Cawnpore. It would have gone further had not the Secretary of State suddenly compelled them to suspend all their activities. In 1909 the Madras Government had proposed to the Secretary of State the appointment of a Director of Industries,

the establishment of a bureau of industrial information and an industrial museum, in to which the Secretary of State (Lord Morley) in his famous despatch of July 29, 1910, ordered the Madras Government to confine their action strictly to industrial instruction and to suspend their activities in all other directions. As a result of this despatch not only the Madras Government but also the Central Government and the Government of the United Provinces were obliged to drop all the schemes of industrial development they had in hand.

Industrial Policy during the war. When the Great War broke out in 1914. India found herself unprepared to face the situation created thereby. India being almost completely dependent upon foreign countries for the supply of manufactured articles, her economic life was paralysed when the imports of these articles gradually ceased. The Government too began to feel the scarcity of certain articles of military importance which could no longer be procured in desired quantities. Naturally this state of affairs compelled the Government to overhaul their whole industrial policy. In preparation for this step the Government of India sent a despatch in November, 1915, to the Secretary of State pointing out that "a definite and selfconscious policy of improving the industrial capabilities of India will have to be pursued after the war, unless she is to become more and more a dumping ground for the manufactures of foreign countries", and suggesting that "after the war India will consider herself entitled to demand the utmost help which the Government can afford to enable her to take her place, so far as circumstances permit, as a manufacturing country".

In the meanwhile, in order to make up the deficiency in the supply of various kinds of war materials as well as materials of industrial importance the Government set up in April, 1917 the Indian Munitions Board. The Board organized the manufacture of certain articles which were not either manufactured in India at all or whose local supplies were inadequate. As the main object of the Board was to organize the manufacture

of war materials and of such manufactured articles as were required to enable the industries of the country to carry on operations as smoothly as possible under the circumstances, we may say that the Board helped the manufacturing industries of the country only indirectly. But it must be conceded that without this help the industries in India would have suffered a great deal for want of various basic articles. The results of these activities were far-reaching. Encouraged by various facilities available at the moment and by extravagant promises regarding Government's industrial policy after the war, a number of new industries came into existence. But immediately after the war the Government forgot all about the existence of these new enterprises which its promises had brought to life, so that with the increasing severity of foreign competition most of them were compelled to close down.

The appointment and Report of the Industrial Commission. We have just referred to the war-time resolve of the Government to help Indian industry actively on the termination of hostilities; it would thus appear that the industries established during the war were allowed to decline during the post-war period in spite of the Government's war-time resolves and promises. But while the war was going on, the Government lost no opportunity of demonstrating its desire to develop the manufacturing industries in India. The appointment of the Munitions Board was a war-time measure; in preparation for laying the foundations of a more permanent industrial policy the Government announced in 1917 the appointment of the Industrial Commission. This Commission was entrusted with the task of enquiring whether and, if so, in what manner, Government should give direct encouragement to industrial development by (1) offering technical advice, (2) demonstrating the practical possibilities of particular industries, (3) giving direct or indirect financial assistance, or (4) any other means which were not incompatible with the existing fiscal policy of the Government.

The Commission made a sifting enquiry into the industrial requirements and resources of India, and in their Report out-

lined a plan of action which was based on the assumption that without state intervention the development of industries in India could not proceed at the pace necessitated by the requirements and warranted by the resources of the country. Their Report covered every field of state activity in relation to industry, except the most important of all, the fiscal policy of the Government, and they were prevented from discussing fiscal measures by their terms of reference. However, in spite of this handicap, they produced a plan of industrial development which, though far from being scientific or even logical in its constructive efforts, should have provided an excellent ground for laying the foundations of Government's industrial policy.

The Commission after making useful recommendations with a view to ensuring adequate supplies of agricultural, forest and mineral products proceeded to examine the bearing of various material deficiencies on the development of industries, and recommended that steps should be taken immediately to establish various key or basic industries and to survey the possibilities of hydro-electric power development in order to develop industries in the areas far off from the coalfields. They further recommended that facilities for scientific research and technical education should be provided, and with this end in view they proposed that the Government should establish Imperial Services to which scientific and technical experts may be recruited. Research Institutes were to be established at some of the chief centres of industry so as to bring them in direct touch with the technical problems facing an industry or industrial establishment. Again, local Governments were required to provide facilities for primary and industrial education for the artisan classes by establishing industrial schools. As regards higher technical education, the Commission suggested schemes for the establishment of institutions specializing in engineering, metallurgy, mining, technology and others. The Commission attached great importance to the purchase of Government stores in India itself as a method of helping industries, and accordingly

recommended that the railways and Government departments should, as far as possible, obtain their supplies from Indian manufacturers. In order to demonstrate the possibilities of various new industries the Commission recommended that the Government should set up demonstration and pioneer factories in suitable localities. As regards the financing of industry, the Commission recommended that industrial banks may be set up, that in case of loans from the banks for current finance the Government may stand as security, and that in certain cases the Government should provide direct financial aid in the form of guarantee of dividends, loans of funds for initial and current finance, or direct contribution to the share capital, and by undertaking to purchase a definite amount of output.

These proposals of the Commission were designed to be either provincial or Imperial (all India) in scope. In dealing with those which belonged to the provincial sphere, the Commission recommended the creation of specialized Departments of Industries. For the "direction and co-ordination of the general industrial policy of the country and the proper performance of certain functions of high national importance", the Commission recommended the creation of a separate Imperial Department of Industries. And, finally, in connection with the nation-wide activities of the Imperial Department, the Commission suggested the creation of an Imperial Industrial Service.

The Reform Act of 1919 in relation to Industrial development. It is obvious that the Industrial Commission did not offer a comprehensive plan of industrial reconstruction and that at best they suggested only haphazard action in certain spheres, so that even the acceptance of the Report in its entirety by the Government would not have resulted in the development of industries according to the potentialities and requirements of the country. Yet it must be conceded that the recommendations of the Commission marked a great advance upon the policy hitherto followed by the Government. However, the Report was given a warm reception both by the Government and the country at large. But the situation was completely changed

by the Reform Act of 1919, which granted partial autonomy to the provinces. It was into these new political arrangements that the scheme of industrial development as offered by the Industrial Commission had to be fitted. It was now to be determined whether the development of industries should remain an imperial subject, or whether it should be decentralized and put under the control of the provincial Governments. Government of India, taking into account the limited means at the disposal of the provinces in contrast to the great magnitude of the problem, fought hard for the centralization of state action. But in vain. In so far as the activities of the Central Government were concerned, a central subject dealing with the development of industries in cases where such "development by central authority is declared by order of the Governor-General in Council, made after consultation with the Local Government or Local Governments concerned, expedient in the public interests" was introduced. The control of mineral development was, under certain conditions, also reserved for the central Government.

It will be noticed that opportunities for direct action fell mostly to the lot of the provinces, notwithstanding the fact that they could not be expected to discharge their duties according to the requirements of the occasion owing to the inadequacy of their financial resources for such costly activities as the direct or indirect financing of industrial enterprises, the installation of model and demonstration factories, the provision of facilities for scientific research, or even the appointment of technical experts and specialists who in the scheme proposed by the Industrial Commission were expected to play a part of outstanding importance. Again, the provincial Governments, which were independent of each other and even of the Central Government in the field of transferred subjects, could not be expected to frame their policy according to the requirements of the whole country. There has been thus no national policy behind the activities of the State during the years that have elapsed since the Reform Act of 1919 came into operation. The consequences of this lack of policy and co-ordinated effort have been far reaching: as will be shown in the following pages, India has made little industrial progress since the war in spite of the fact that the development of industries is supposed to be under popular control.

Recommendations of the Fiscal Commission. The most serious drawback in the Industrial Commission's programme was that it was drawn up without reference to the Government's fiscal policy. The Government of India did not enjoy, indeed it does not enjoy up to the present day, the authority to shape its fiscal policy quite independently of the wishes of the Secretary of State. The Secretary of State in his despatch of June 30, 1921, had granted permission to the Government to shape their fiscal policy according to the requirements of India, but the newly-won liberty in matters relating to fiscal policy proved, as transpired later on, to be illusory. However, armed with the Secretary of State's despatch, the Government appointed in October, 1921, a Royal Commission to recommend a fiscal policy that they might adopt in the interests of manufacturing industries.

The Fiscal Commission, after establishing the obvious case for the development of industries, proceeded to show (1) that in spite of various natural advantages new industries cannot be introduced and developed in an industrially young country when those industries have to compete against fully developed rivals; (2) that protective duties are necessary to neutralize the effects of an earlier start, and (3) that these protective duties should be resorted to only in the case of those industries which can eventually face foreign competition without protective tariffs, or which are necessary for the safety of the nation. arguments of the Commission led to the recommendation that "a policy of protection to be applied with discrimination" should be adopted by the Government in order to stimulate the development of industries in India. According to this recommendation only those industries were to be considered entitled to receive protection which could prove their ability eventually to face world competition without the assistance of protective tariffs, and the amount and duration of protection

were to be the minimum possible consistent with the ideal of just enabling the industries to stand on their own legs. The Commission further recommended that, subject to the abovementioned conditions, non-basic industries may be assisted by means of import tariffs, and that basic industries may be assisted chiefly by means of bounties. In order to enable the Government to carry out the above policy, the Commission recommended the creation of a permanent Tariff Board to whom. among other things, the duty of examining the claims of various industries to protection and of watching the operations of tariffs and bounties was to be entrusted. The Commission suggested that the Tariff Board in dealing with the claims of various industries for protection should satisfy itself: (a) that the industry possessed natural advantages, (b) that without the help of protection it was not likely to develop at all or not so rapidly as was desirable, and (c) that it will eventually be able to face world competition without protection.

Fiscal Commission's recommendations in relation to The recommendations of the Fiscal Commission fiscal policy. were accepted by the Government of India, and are now supposed to form the basis of its fiscal policy. The question arises: are the principles underlying these main recommendations of the Commission scientifically sound, and are these recommendations likely to meet the requirements of the country? As no useful purpose would be served by establishing those industries which are neither necessary for national defence nor are the conditions for whose establishment so favourable in India as in foreign countries, we should have no hesitation in accepting the principle of "discriminating protection" as the key-stone of India's fiscal policy. The methods prescribed by the Commission for helping various kinds of industries are also undoubtedly sound. And, finally, the machinery proposed by them in connection with their recommendations was probably the most efficacious under the circumstances. Its merits had already been proved in the United States and other countries.

But in spite of all this the policy propounded by the Commission could not be expected to stimulate the growth of

industries. The Commission took only the requirements of the industries that already existed into consideration—so much so that it actually went to the limit of recommending that no State assistance by means of bounties and protective duties should be given to industries which have yet to be established. In other words the Commission expected that people should first invest lakhs and in some cases crores of rupees in setting up industrial establishments, work at a loss for some time and then wait till the Tariff Board could announce its decision in its own leisurely manner for or against the grant of protection.

It was on these worthless foundations that the fiscal policy of India was destined to be laid—the policy which was expected to expedite the development of industries. The plain fact is that the Commission never suggested a really constructive policy: they merely suggested some fiscal measures to keep some of the existing industries alive. In these circumstances their recommendations could not serve as the basis of a really reconstructive policy, and the record of industrial progress during the past twelve years provides concrete proofs in support of this contention.

Developments under the Reformed Constitution. new Reform Act of 1919 had given the powers of direct action in relation to industrial development to the provinces, so that the Central Government felt justified in acting as a disinterested spectator. In February 1921 a Central Department of Industries was set up, but without any power of direct action. In January 1022 the Indian Stores Department was established to act as a purchasing and inspection agency for the Central and Local Governments, but so far this department has done nothing very much to encourage the use of Indian manufactures by the Government. Further, in accordance with the recommendations of the Fiscal Commission the Indian Tariff Board was appointed in July, 1923. As we have seen, the Board has already examined the claims of a number of major and minor industries to protection, and in some cases some sort of protection has been granted. But it is worth noting that the Government has not in all

cases granted protection according to the recommendations of the Board.

In the provinces the progress was initially more spectacular. By 1921 a Department of Industries had been set up in every province. In connection with the activities of these departments, pseudo-experts and executive officers were appointed with a lavish hand. But behind all these activities there was no definite programme or policy: nobody knew exactly what the goal of all these activities was or what the requirements of the country at large were. However, as far as technical and industrial education goes, we may say that the Technological Institute at Cawnpore, the School of Mining at Dhanbad and the Technical Institute at Jamshedpur are the outstanding achievements, so that taken as a whole the country has not made much progress in this direction. The record of progress in the field of lower technical education is even more disappointing as we find that since the introduction of Reforms only about half a dozen schools have been started. A very large number of schools for training ordinary skilled workmen have been started in every province, but more than go per cent. of these schools confine their attention to the training of craftsmen for cottage industries, and as such can be of little help to the organized industries of the country. As regards scientific and industrial research, we have the Forest Research Institute at Dehradun, the Cawnpore Technological Institute and the Indian Institute of Science at Bangalore. Some research work is also being done in connection with various industries in small Government-aided institutions in various provinces; but as a rule these institutions are poorly equipped, and as such cannot be of much help to industry. As far as technical assistance to industries in the form of expert advice goes, the record of most of the Provincial Departments of Industries is almost blank. Only a highly qualified expert can give technical advice, and the financial resources of the provinces were so paltry that the engagement of expensive technical experts was out of the question. In the field of pioneering and demonstration something has been done in

connection with sugar, match, leather-tanning, soap and other industries, but it would appear that in all these cases they were demonstrating obvious and well-established facts, and as such activities in this expensive field could not serve any useful purpose. However, it was not long before they realized their mistake and abandoned the toy-factories they had set up. As regards financial assistance to industries, we have to record that in some of the provinces (such as Madras, Bihar and Orissa and the Punjab) Acts regulating the grant of financial assistance to industrial concerns are in force, while in others no limitations have been imposed upon the activities of the Government in this field. But from the annual reports of various provinces it appears that so far only about Rs. 50 lakhs have been given in loans by the provincial Governments. As far as our information goes, in only six cases loans above Rs. 1,000,000 were granted, so that we may safely conclude that organized industry has not benifited much from these loans.

The Causes of failure. From what we have said in the preceding pages it is abundantly clear that the Central and Provincial Governments between themselves have been rendering assistance to industry by all conceivable means: protection has been granted, financial assistance has been given, provision has been made for technical and industrial education, research institutions have been established, technical assistance has been given, and pioneering and demonstration factories have been set up. The net result of all these activities has been that certain industries have just been able to carry on and a couple of industries (match and sugar manufacture) have been developed to the extent of the requirements of the country. This is undoubtedly a poor achievement, and shows that in all these governmental activities, which are constantly paraded by the administration and its friends, something vital is lacking. The causes of the poverty of results may be summed up in It is because governmental action has been one sentence: utterly inadequate and because there was no system or plan behind that action. The inadequacy of action needs no explanation: action in the field of finance, research, pioneering

demonstration and technical education has been taken, but it has touched only the fringes of the extensive requirements of industry. As far as individual industries are concerned, fiscal action has been adequate in some cases while in others it has been far from adequate; but inasmuch as the fiscal policy of the Government does not encourage the establishment of new industries, it is not conceived, far less worked, in the interests of industry as a whole. As regards the absence of plan, it may be said that the Government has so far failed even to realize what its goal in the field of industry is, and consequently its actions are spasmodic and unsystematic. meaning of this contention and the consequences of this lack of policy become clear when we take into consideration the case of certain industries and groups of industries. The steel industry was awarded protection for a number of years, but nothing was done to ensure the expansion of the industry to the extent of making the country self-sufficient in the matter of steel, which could have been done without much additional sacrifice on the part of the consumer or throwing additional burden on the country's exchequer. The result of this lack of policy has been that India is just as much dependent on foreign countries for the supply of steel as she was on the day protection was granted to the steel industry. The absence of plan is in a different way illustrated by the grant of protection to the sugar industry. We have seen that the grant of protection to this industry has resulted in making the country nearly self-sufficient in the matter of refined sugar. But while protection was granted to the industry, nothing was done to ensure the expansion of the industry on sound scientific lines, with the result that in the event of the removal of protective duties the closing down of a very large number of unfavourably suited mills seems certain. Of course nothing has been done to encourage the development of even the most important industries of the basic group, with the result that various dependent industries find themselves unable to compete with their foreign rivals owing to the high cost of basic articles. This inadequacy and absence of action shows that the

Government has not the remotest intention of industrializing India, and that if certain industries have been established in the country during the past fifty or sixty years, that progress has been made in spite of the Government's indifference.

Suggested lines of State action. If the manufacturing industries are ever to be developed in India on sound, scientific lines according to the extent of the country's natural resources and requirements, the Government will have to begin by manifesting a complete change in their attitude towards industrial development; in other words the Government must be convinced of the absolute urgency and necessity of industrial development, and must manifest its willingness to work to that end by all means in its power. This change of attitude may be followed by action. As so far no accurate information is available regarding the industrial potentialities of India, a thorough-going inquiry into the possibilities of each industry must be undertaken. This would be the first step in forming a plan of industrial development.

At this stage it may be noted that the formation of a plan would be necessary if industries are to be developed within the shortest possible time, and if the faults connected with the uneven development of various industries are to be corrected. Without a plan certain important, but highly technical, industries (such as certain basic industries) may not be developed at all while other industries whose possibilities have already been demonstrated may conceivably be over-developed. Again, the process of development may be unduly prolonged and so the consumer may be required to make disproportionately greater sacrifices in the absence of a plan. Russia, where as a result of the famous five-year plan all basic industries were fully developed within the short space of five years, provides us with an excellent example of the necessity and potentialities of a plan. And in India without a plan the development of industries will be as slow, haphazard and uneven as it has been in the past.

As the unwillingness of the people to invest capital in industries, lack of technical knowledge, and the absence of

some of the important basic industries are the root causes of industrial stagnation, the plan of industrial development must start by providing remedies for these anomalies. There is no doubt that immediately steps are taken to rehabilitate and protect industries so as to enable them to give adequate returns on investment, industry will cease to experience any scarcity of capital. But if in spite of these developments a new industry does not attract requisite amounts of capital, the plan must provide for the financing of that industry by the State itself. This would be all the more necessary in the case of basic industries on which other industries will inevitably be dependent. In fact it seems that the development of basic industries should be the first concern of the Government. As some of the industries which have yet to be developed are based on highly technical processes, the plan must provide for technical assistance to these industries by the State at its own expense.

But all the facilities relating to finance and technical assistance would come to nothing if the Government does not shape its fiscal policy according to the requirements of each industry. Industries in India will have to compete with longestablished industries in foreign countries, and unless they are protected from foreign competition, no amount of facilities in other fields would induce people to invest their capital in new ventures. The plan of industrial development therefore must include the award of protection to all old and new industries provided the preliminary survey has proved that those industries will eventually be able to stand on their own legs. Again, the plan must provide against all possibilities of dumping by foreign countries. It is a well-known fact that since the war India has become the dumping ground of all the manufacturing countries in the world. The grant of protection according to the difference in the cost of production will not be of much use in such cases: the plan must provide a suitable machinery for dealing with such cases according to the requirements of the occasion.

Apart from the provision of facilities in connection with finance, basic industries, technical assistance and fiscal action,

which must serve as the foundations of industrial structure, the plan must also provide for facilities in connection with technical education, transport, power generation, industrial housing, and acquisition of land for industrial purposes; for unless facilities for technical education of both higher and lower types are provided, the quality of output will compare unfavourably with the quality of foreign articles; in the absence of cheap and adequate transport (both land and water) the industries will be handicapped in the matter of marketing costs; unless cheap power is available (which can be done only by the development of hydro-electric power and the establishment of central generating stations in the coal zone) the high cost of power will militate against the development of industries; in the absence of adequate housing facilities industrial labour will remain inefficient; and unless facilities for the acquisition of land for setting up factories in suitable localities are provided, either the factory owners will have to pay exorbitant prices for land or they will be compelled to set up factories in unsuitable localities, so that in both cases industrial development will be retarded. Lastly, it may be necessary to adopt special measures in order to ensure the growth of each individual industry. We have already referred to the necessity of awarding protection to infant industries. But in the case of certain industries success may depend upon constant technical improvements which may be too expensive for any individual concern to initiate. such cases research facilities must be provided by the State Then there are certain industries which are based entirely on forest and mineral products; but as in India the forest and mineral rights are most often vested in the State, it may be necessary for the Government to encourage the development of these industries by granting forest and mineral concessions on favourable terms. And, finally, as the future of certain industries is dependent upon the quality and amount of agricultural, animal and forest products available in the country, it may be necessary for the Government to help those industries by taking measure with a view to ensuring the supply of those materials in desired quantities.

The necessity for simultaneous action. The various general and special measure suggested above must not be expected to yield the desired result unless they are all taken in hand simultaneously. The adoption of various parts of the plan in a haphazard sort of way would serve little useful purpose: in fact it may be said without exaggeration that in the case of certain industries the omission of one single item is likely to nullify the effects of all the constructive measures put together. In other words, if industry is to be developed in India according to the extent of the requirements and natural resources of the country, the goal will be achieved quickly and with the least amount of effort and sacrifice only when a definite programme of action has been chalked out by the Government. Without such a programme or plan the progress will be as slow, uneven and unstable as it has been in the past.

Political freedom as the essential condition of industrial progress. But it would be idle to expect planned action in the field of industry so long as the political machinery of the country remains under the direct or indirect control of Britain. Britain's economic and political future being bound up with her industrial and commercial supremacy, the development of manufacturing industries in India would obviously be against Hence the subordination of Indian her ruler's interests. industrialization to the interests of British commerce and industry in the past which is reflected in the lack of policy and action on the part of Indian Government even at the present time. Hence also all those safeguards and reservations in the Government of India Act of 1935 which is supposed (by its authors and their henchmen) to bestow the blessing of selfgovernment upon India. To give but a few examples, according to the new Act India must not discriminate against Britain in any manner in the economic field. The result of these provisions will be that India will be turned, more than ever, into a dumping ground for British goods. Again, as the Act puts the borrowing powers of the Provincial and Central Governments ultimately into the hands of the Governors and Governor General (who, we may presume, will also be

Britishers), the possibility of using borrowed funds for financing various nation-building activities, especially industrial development, would be more or less completely cut out; and we have seen that without the direct or indirect participation of the State the development of industries in India is not possible. Even if borrowing could be completely avoided, the formulation and enforcement of a plan of industrial development would necessitate legislative enactment; and there is no reason to suppose that all the Governors and Governors General would be turned into archangels so as to give their approval to the measures that are likely to do some damage to the industries and commerce of their own native land. The Art gives them ample powers to withhold their consent to "obnoxious" legislation, and it should always be possible to stigmatize the provisions of a bill as against any particular section of the community, and consequently of the country as a whole. And lastly, it may be possible to bring about the development of industries through the agency of public finance; but while even in normal circumstances this method has its limitations, under the new constitution it would be impossible to exploit it in India owing to the peculiar allocation of the sources of revenues (between the Central and Provincial Governments) as well as on account of the fact that the Legislature will have no control over more than 80 per cent, of the expenditure of the Central Government. In other words the revenues of the Provincial Governments will be inelastic or unexpandable while those of the Central Government will remain preponderatingly outside popular control.

In the circumstances outlined above we must not expect great improvements in the field of industry under the new Constitution. The fact of the matter is that, as the interests of British and Indian industries must always clash at every step, no improvement in the field of industry will take place in India so long as the Indian people are not the complete masters of their political destiny.

CHAPTER XV

LABOUR IN ORGANIZED INDUSTRIES.

The scope and importance of the subject. The problems of industrial labour may be studied from two points of view. viz. subjective and objective. But these two lines of study are so inextricably mixed up that it is not possible to take them up separately. The reason is obvious: as will become abundantly clear in the course of the present chapter, the welfare of the worker is governed by and in turn reacts upon various material factors. However, as labour is a necessary factor in industrial production and development, we propose to discuss its problems from the objective point of view in the first instance and to examine the subjective side only in relation to production itself. The main lines of inquiry may thus be summed up as follows. As labour is a necessary factor in production and as the rate of industrial development will be governed, among other things, by the number of suitable men actually available for the purpose, we will have to examine the sources and possible extent of labour supply for various industries. Again, as Indian manufctured articles will have to compete with the products of foreign countries, and as the cost of labour is an important item in the total cost of production, a comparison of the cost of labour (in relation to output) with other countries will be necessary. But as the cost of labour is to be reckoned in relation to output, it will be necessary to examine the productive capacity or the efficiency of labour.

These main branches of enquiry have wide ramifications so that it would be impossible to discuss them adequately without direct reference to some other problems which are immediately connected with these main topics. As far as the supply of labour for industrial purposes is concerned, it is obvious that it will not be governed entirely by demand: the conditions of work in the factory, the amenities of life enjoyed by workers in industrial areas, the present economic

condition of the would-be factory labourer and the esteem in which he holds the improvement of his prospects will be the governing factors, and as such it will be necessary to discuss them in some detail. Again, as the cost of labour is relative to its efficiency and output, and as efficiency itself is dependent upon a variety of factors connected with the physical and mental capacities of the worker and the remuneration he receives for his labour as well as his education, his habits and customs, his standard of living and the nature of the surroundings in which he lives and works, it will be necessary to take full account of these and various allied factors.

Indian Factory Labour: its growing Importance. It has been shown in a preceding chapter that the number of factories in India has increased considerably during the past fifty years. It would thus be natural to assume that more or less a corresponding increase has taken place in the number of workers employed in them. But unfortunately these developments have been unplanned and uncontrolled, with the result that various evils associated with such unplanned developments in other countries were also witnessed in India, and the magnitude of these evils increased with the growth of the factory system in the country. Of these evils those associated with the condition of the working classes were the most far-reaching in their effects, on the industrial development of the country. The labour problem became acute with the passage of time and assumed menacing proportions after the war inasmuch as it threatened the existence of one industry after another, and so indirectly menaced the economic development of the country. It was in these circumstances that a Royal Commission was appointed on May 24, 1929 "to enquire into and report on existing conditions of labour in industrial undertakings and plantations in British India, on health, efficiency and standard of living of workers and on relations between employers and employed; and to make recommendations." The Report of the Commission, which was published in 1931, is the most up-to-date treatise on the subject of Indian industrial labour, so that most of the facts on which our own interpretation of the problem and the solution of its difficulties are based have been borrowed from it.

Industrial Labour: Its estimated strength and migratory character. It is not possible to form even a rough estimate of the total number of persons dependent wholly or partly on organized industries of India. According to the Department of Commercial Intelligence and Statistics the number of persons employed in perennial and seasonal factories in British India and Indian States stood at 1,723,193 in 1931-32. But in order to form an estimate of the number of persons engaged in industrial operations we must also take into account nearly 250,000 persons engaged in various kinds of mining industries. On this basis of calculation the total requirements of organized industries in India amount to roughly 2,000,000 hands.

But it must not be assumed that the above figures represent the actual number of persons who are wholly or partly dependent on organized industries for their livelihood. No reliable data are availabile; but a study of the conditions prevailing in various industrial and mining centres would suggest that not more than 20 per cent. workers have so far been completely industrialized, i.c., are completely dependent on organized industries for their livelihood. In these circumstances the number of men claiming connection with these industries must be substantially larger than that indicated by the above figures from what we have to say in the following paragraphs it will become abundantly clear that not less than 3,000,000 persons are directly connected with organized industries at one time or another.

The dependence of more than three million persons on organized industries, while the requirements of the latter do not exceed the two million mark, is rendered possible by the fact that various circumstances have prevented the Indian industrial labourer from completely severing his connection with the village—his birth place—so as to devote his whole time and attention to work in the factory. His permanent home is in the village and not in the factory area, and more often than not he leaves his family behind in the village. He returns

to the village whenever he finds it convenient—sometimes to recupurate his health (which is often damaged by long hours of work in unfamiliar and unwholesome surroundings and by his unsober, unclean and unhygienic ways of living), but more frequently to enjoy life in the more agreeable and healthier atmosphere of his home in the countryside. There is thus a continuous influx and efflux of labour: workers habitually return to their homes for varying lengths of time, and their place in the factory is taken either by fresh emigrants from the village or by those whose holiday or trip to the village has terminated.

Sources of labour supply. The above account of the migratory character of industrial labour clearly shows that the heart of the worker is always in the village, and it is always by the force of some disagreeable circumstances that he is pushed towards the factory and mine. Such circumstances are varied, but they have one thing in common: they are all the outcome of the villager's inability to make the two ends meet in his own native place. Apart from the small minority of workers who are permanently industrialized, the great army of industrial labourers is composed mainly of four classes, namely, the landless agricultural labourers, the village artisans, the village menials, and small cultivators. The landless labourers, whose numbers are increasing fast, are often compelled to seek a livelihood away from the village, because agriculture is not in a position to give employment to all of them throughout the year. The village artisan is compelled to join the procession to the factory because the village offers no scope for employment. The village menial is similarly inspired by better prospects when he migrates to the factory, but the intolerable social conditions in the village are also in some cases responsible for his movement towards factory towns. And lastly, the small cultivator is compelled to go to the factory because he finds the holding too small to offer even bare subsistence to the growing family, or because he has to pay for new cattle or land. All these four classes have sometimes one thing in common: their debts to the moncy-lender sometimes become too oppressive to be lifted by their ordinary income, so that one or two members of the family are compelled to supplement the income of the family by the adoption of such extraordinary measures as migration to the mine or factory.

The representatives of all the various classes mentioned above are found in every large centre of industry in India. But, contrary to what might be expected, it is not always from the neighbouring rural areas that the supply of labour is obtained: in many cases the supply is obtained from far distant places. To begin with, we find that in Bengal the various organized industries are run chiefly by men from other provinces in spite of the great density of population and the poverty of the people. These factory labourers in Bengal are chiefly the natives of Bihar and Orissa, the United Provinces and the northern districts of the Madras Presidency. These areas, along with Chota Nagpur, are also responsible for the supply of unskilled labour to the coal mines in Bengal. The reason why entire industries in Bengal have been captured by men from other provinces is that, owing to climatic, physiological and psychological causes, the Bengali has become totally unfit to stand the strain of work in factories and mines. The Bombay Presidency, on the other hand, is more self-supporting than Bengal in the matter of its labour supply. It is certainly true that the mills of Bombay, Ahmedabad and Sholapur are not dependent entirely upon local labour, but at the same time not more than 20 per cent. of labour employed in these centres of industry belongs to other provinces. In the United Provinces the chief centre of industry is Cawnpore, which is situated in a densely populated area, so that it is dependent almost entirely on locally-recruited labour. Jamshedpur is dependent on the neighbouring provinces for nearly half of its labour force, while the coal mines of Bihar and Orrissa are almost entirely dependent on the neighbouring districts. Some mills and factories have also been set up in the cities of Madras, Nagnur and Delhi. The labour requirements of these centres are small, so that they seldom feel the necessity of looking far beyond the adjoining villages for the supply of both skilled and unskilled labour.

Methods of recruitment. The methods of labour recruitment practised at various centres of industry in India are, except in minor details, remarkably similar. Unlike what we find in Europe and America, the labourer does not always present himself for work directly at the factory or at an employment bureau: he is recruited by a person who is at once a recruiting agent and an employee in a mill or factory. The supply of labour being more often than not greater than the demand for it, the workman often finds it difficult to get work without bribing the foreman or overseer. As pointed out in evidence before the Royal Commission of Labour, while the selling of jobs is only a seasonal affair in Bombay, this practice is a recognized part of the whole labour-recruiting procedure in Calcutta, where it is impossible for a workman not only to find a job but even to retain it without bribing the Sardar or foreman. The same system of labour recruitment is practised at Ahmedabad, Sholapur, Cawnpore, Delhi, Madras, Nagpur and the various mining centres, with the difference that the practice of buying and selling of jobs is not so much in evidence there as in Calcutta and Bombay. Here and there some sort of control over labour recruitment is exercised by the employers, but that control is far from perfect. Conditions are rapidly changing all over India, but as far as our information goes, Jamshedpur is the only place where the recruiting overseer has been completely ousted by the establishment of a labour employment bureau.

Foreman class and its recruitment. As the degree and nature of control over ordinary workmen show wide variations from industry to industry, we cannot expect any uniformity of procedure with respect to the recruitment of men to the foreman class. In most of the cotton and jute mills the foremen rise from the ranks of ordinary labourers; but promotion in these cases is determined more by personal considerations than by the merits of the worker. The woolen mills of Cawnpore and Dhariwal are known to take merit and record of service into account owing to the difficulties of their technique. On the other hand in some of the more up-to-date engineering

establishments in Bombay and Calcutta preliminary technical training and standard of general education determine a workman's eligibility for promotion to the foreman's grade : in other words workmen destined to become foremen are recruited as such. In these cases, however, departmental foremen have. almost without exception, European experience and qualifications. The same tendency of recruiting and training workmen especially for the position of foremen is in evidence in large modern tanneries all over India. It is however, at Jamshedpur that the most daring and up-to-date methods of recruitment have been introduced. In the absence of trained Indians, the Tata works had to engage European foremen during the early stages, but little time was lost in making arrangements for the training of Indians. By these simple and commonsense methods a large number of efficient and reliable foremen have been gradually trained for various departments. The methods of recruitment followed in other industries (such as paper, sugar, cement, glass, pottery, vegetable oil and others) are as unprogressive and antiquated as those we have described in connection with the cotton and Jute industries. This is partly due to the fact that the importance of foremen is imperfectly appreciated in these industries in India, and partly because little is done to encourage educated voungmen to take up these jobs.

Mental equipment of Indian factory workers. We have seen that so far only a few factory workers have been permanently industrialized in India and that the great majority of them are agriculturists who have been compelled by circumstances to take up factory work. As education has not made much headway in rural areas and as only men belonging to the poorest sections of the rural community take up factory work, we must assume that a very small percentage of the semi-industrialized workers in India can read and write. But the evidence given by the representatives of labour before the Whitley Commission tended to show that nearly 20 per cent. of the labourers engaged in the textile mills of Bombay, Sholapur and Ahmedabad were literate. This high percentage appears to be due to the fact

that nearly 50 per cent. labourers in Sholapur and Ahmedahad and nearly 20 per cent. in Bombay (where compulsory education Acts have been in operation for some time) have been permanently industrialized. The position is distinctly more deplorable in the coal mines and in Calcutta and its suburbs where, as shown in evidence before the Whitley Commission, less than 5 per cent, workmen can read and write. Nothing definite is known about the various smaller industrial centres, but as the Compulsory Education Acts do not apply to the rural areas, the standard of literacy must be even lower than in Calcutta. Jamshedpur, of course, leads the way in the matter of education -as indeed in all other matters. Primary and technical schools have been established, which provide day and evening classes for workmen and their children. The results of these efforts. however, will be apparent only when the younger generation comes into the field. But even as it is, it may be said that while most of the skilled and semi-skilled workmen are already literate, the tendency at Jamshedpur is towards the universalization of education by affording all possible facilities for the education of even the unskilled labourers.

But the standard of education at all the various centres (except Jamshedpur) is hopelessly low. Most of the so-called literate workmen in Bombay, Ahmedabad and other centres can just read a prayer book or write a letter, which does not in any way indicate a high standard of mental development. In these circumstances it is difficut to see how the educational achievements of even the existing tiny minority of workmen can be regarded as an asset to industry.

Standard of living. The intellectual backwardness of the industrial labourer is reflected, among other things, in his mode and standard of living. He is born and brought up in the village where life is primitively simple and its requirements are few; and, in the absence of the progressive influence of education, he cannot shake off his old habits even in his new surroundings in the city. This deplorable state of affairs is 10 doubt the direct outcome of poverty in rural areas; never-heless its consequences are far-reaching. The low standard of

living is responsible for lack of efficiency, staying power and above all ambition. But then a man's mentality is changed and re-shaped to a considerable extent by material environments. The question arises: why is factory life in India barren of all progressive influences? It seems we must look for the additional causes of the mental stagnation of Indian workmen in the nature of the material and social surroundings in the factory area.

Housing in Industrial areas. It may be taken as almost axiomatic that a man's standard of living is reflected in the place where he dwells. But his dwelling place is something more than that: it exercises a powerful influence upon his standard of living itself. In other words it acts both as a cause and effect. And the working class tenements in India are no exception to this rule.

Housing conditions in every centre of industry in India, excepting of course Jamshedpur, are in a deplorable state. The worst and the gloomiest side of the picture is provided by the city of Bombay where single-roomed tenements are found clustered together in dark narrow alleys with no adequate drainage and water supply arrangements. And the city of Calcutta is not far behind Bombay in this respect. In the smaller centres of industry (including the suburbs of Calcutta) and the various mining areas the state of affairs is less appalling. In these centres land is cheap so that it is possible to erect groups or rows of single-roomed huts in the neighbourhood of factories and mines. These groups of huts, known as bastis, are generally as over-crowded and filthy as the chawls in larger centres, and if they are at all preferable to the slums of Bombay and Calcutta it is because of their rural surroundings and because of the plentiful supply of light and fresh air. is only at Jamshedpur that we come across satisfactory conditions. Here the Tatas have built commodious and wellventilated houses for their workmen. The water supply and sanitary arrangements are excellent and their rents are low. In short, at Jamshedpur housing arrangements come up very nearly to the ideal in contrast with the appalling conditions

prevailing in other centres. Incidentally it shows the results of planning in contrast to the consequences of its absence.

Of course very little has been done by the employers and local or provincial Governments in the direction of improving housing conditions in the various centres of industry. Bombay the Improvement Trust and the Development Directorate of the Government of Bombay have built nearly 30,000 one-roomed tenements during the past twenty years or so, but these measures have not relieved congestion to any appreciable extent. The mill-owners, on the other hand, have done next to nothing in the matter. In other centres of industry very little has been done by way of providing better and more sanitary tenements, and even that little, contrary to what has happened in Bombay, has been done not so much by Government or local authorities as by employers themselves. Some of the European firms in Madras and Cawnpore have been particularly active, but even they have not succeeded in providing accommodation for all their workmen. The city and suburbs of Calcutta are, in this respect, the most backward areas in India, where both the Government and employers are equally indifferent. In these circumstances when we take the country as a whole, we inevitably come to the conclusion that what has actually been achieved in the field of housing represents only a drop in the ocean, and the quality of even that tiny drop is far from satisfactory. Overcrowding and insenitary conditions are still prevalent even in the so-called improved working class areas with the result that they are still the breeding grounds of disease and epidemics with all their adverse effects on the outlook and efficiency of the working classes.

Conditions of work. The conditions in which the factory labourer works are about as appalling as the conditions in which he lives. Most of the mills and factories in India are built with utter disregard of local climatic conditions. As in India a larger number of workmen per machine unit are required than in any western country, there is a great deal of over-crowding. With all this overcrowding, bad ventilation and natural heat

the atmosphere in the factory becomes too painfully depressing for efficient work. Needless to add, very few factories are equipped with modern contrivances for keeping the atmosphere cool and clean. And all these evils are in evidence in spite of a fairly elaborate system of factory inspection. Nor are any amenities of ordinary life provided in the factory. Not only facilities for washing are absent, but, as was complained before the Labour Commission, in most of the mills and factories there is no adequate arrangement even for the supply of drinking water. Thus taken as a whole it may be said that conditions of work in Indian factories are extremely unsatisfactory.

Hours of work. The length of time for which men, women and children have to work each day in these dismal surroundings varies from place to place and time to time. Until recently the hours of work were based on the provisions of the Factory Act of 1922 which prescribed eleven hours per day and sixty hours per week as a maximum in the case of adults (both men and women) and six hours per day in the case of children below fifteen years of age. Industrial establishments, however, did not adjust their hours of work according to these statutory limits. In Bombay, where workmen are better organized, the hours of work were actually shorter than those prescribed by the Act, and similar tendencies were in evidence in other centres of industry, though not exactly to the same extent. On the other hand the evidence given before the Labour Commission tended to show that small employers, especially those operating in out-of-the-way localities, often sucreeded in evading the law. Again, Indian States being outside the jurisdiction of the Government of India in these matters, the Act did not apply to the industrial establishments situated in the States

In accordance with the recommendations of the Royal Commission on Labour, a consolidating Act was passed in 1934 (which was brought into effect from January 1, 1935), which introduced among other things some important changes in the law relating to the hours of work etc. Factory operatives were formerly divided into two groups: (1) adults and (2) children,

i.e. persons over 12 and under 15 years of age. The consolidating Act has introduced a third age group of "adolescents", i.e. persons over the age of 15 years and under the age of 17 years who have not been certified as fit for adult employment. Such "adolescents" as have not been so certified are to be deemed as children. The consolidating Act further reduced the maximum limit of eleven hours per day and sixty hours per week for adults to 10 hours and 54 hours respectively in the case of perennial factories, while in the case of seasonal factories (working for less than 180 days in a year) the old working hours limit was to remain in operation. The maximum hours of work permitted in the case of children is five hours per day both in seasonal and perennial factories.

Scale and methods of remuneration in industry. As wages vary from place to place and industry to industry owing to lack of mobility among the wage-earners in India, it is not possible to make generalized statements on the subject. But a fairly accurate idea of the conditions prevailing in industry as a whole may be had by taking into consideration the wages of various classes of workmen in different industries and centres. Let us begin with unskilled labour which is employed in varying proportions to skilled and semi-skilled labour in different industries. As the wages of this class of workmen are governed by the scale or remuneration in agriculture, there are bound to be wide variations not only from place to place but also from time to time according to the condition of crops etc. A good deal also depends upon the cost of living in various industrial centres. In normal times, however, eight annas per day is the upper limit for this class of workmen in Iudia, while in many parts of the country (such as the United Provinces, Berar and the Central Provinces) about five annas per day is the usual rate at the present time. Even if we accept eight annas per day as the universal rate, it would appear that the earnings of an unskilled Indian labourer amount to less than one-eighth of those of an average European worker of the same class.

No accurate and reliable data are available regarding the wages of skilled and semi-skilled workmen in various industries at the present time. Moreover, wages of this class of workmen also tend to vary from place to place and even factory to factory in the same centre. Let us, however, take the cotton mill industry first. According to the Department of Commercial Intelligence and Statistics, in 1928 (before the present abnormal conditions in industry started) the mule-side piecers in the cotton mills of Bombay were being paid on an average nearly 20 annas per day, ring-side piecers 16 annas per day and ringfollowers 14 annas per day. At Ahmedabad, on the other hand, the wages of these workinen averaged 17 annas, 15 annas and 11 annas respectively. The scale of wages of these classes of workmen in the cotton mills of Madras, Sholapur, Nagpur, Delhi and other places is even lower than that in Ahmedabad. These are only a few representative cases, but they give us an excellent idea of the condition of the skilled labourer in the cotton mill industry. As against these paltry amounts the earning of Lancashire operatives averaged well above 45 shillings a week in that year, which means that the average Indian operative receives only about one-fifth of what the Lancashire mill-owner pays to his operatives. In the jute mill industry the wages of spinners during this period averaged 8 annas per day, of weavers nearly 12 annas per day, and winders nearly 10 annas per day. In striking contrast to these miscrable figures stand the minimum of £2 per week in the jute mills of Dundee. Still more astonishing is the contrast presented by the wages of skilled workmen known as mistrics. In the jute mills of Calcutta their average monthly income does not amount to more than Rs. 30, at Jamshedpur it is nearly Rs. 40, and the city of Bombay it is about Rs. 45. In the engineering workshops we have again the same state of affairs; here the wages of an ordinary operative do not average more than 16 annas per day as compared with the average of £3 per week in Britain. These figures for various industries prove that the skilled worker in India does not earn on an average

more than one-fifth of what is earned by the same class of workmen in Britain.

Fines and delays in the payment of wages. But even these paltry wages are not paid in full to the worker in India. Fines are a common occurrence in Indian industrial establishments. especially in the cotton and jute mills, with the result that workmen often find appreciable slices being taken off their wages for various trifling faults. Even more offensive and annoying is the system of withholding wages for varying lengths of time-a system that brings untold miseries and hardships upon the factory worker. Sometimes, as in the case of Bombay mills, the wages are paid monthly while holding back a fortnight's wages, so that the new-comer does not get anything for six weeks. At other places wages are paid sometimes weekly but more often fortnightly with a week's wages in arrears. The result is that workmen often run into debt to keep themselves going. The Royal Commission on labour recommended prompt and effective measures to combat this evil; but nothing was done by the Government, until the spring of 1935 when the Payment of Wages Bill was introduced in the Legislative Assembly. The Bill however, has not yet been passed, so that the evils associated with the withholding of wages and levying of fines still continue unabated.

Welfare work. Under this head may be discussed an endless variety of activities affecting labour directly or indirectly, but the most important of these are the provision of facilities in connection with housing, education, sanitation, medical aid, maternity and sickness benefits, compensation for accidents, recreation and amusements, provident and pension funds, unemployment insurance and others. A detailed examination of all these activities is obviously beyond the scope of the present work; but we may have a bird's eye-view of the whole in order to see exactly where the Indian worker stands in relation to these activities.

We have already seen that conditions in regard to housing, sanitation and education (both general and technical) are extremely unsatisfactory at the present time, and that very

little is being done to bring about improvements in these fields. Next in importance to these activities comes medical aid in cases of accidents and sudden illness, and the evidence collected by the Whitley Commission tended to show that in spite of the provisions of various Factory Acts the arrangements on the whole are the poorest imaginable, and that not more than a quarter of industrial workers in India are in a position to avail themselves of medical aid of any description on the spot in cases of illness and accidents. The women workers are the greatest sufferers as, except in the case of a few factories in Madras, Cawnpore and Calcutta, even the most up-to-date in industrial establishments in the country have failed to provide qualified lady medical attendants. The state of affairs in regard to maternity and sickness benefits is equally deplorable. the absence of all-India legislation certain provinces (such as Bombay, Central Provinces and Assam) have Maternity Benefit Acts in recent years, and thus relief is given to women industrial workers in the shape of lighter work and allowances and exemptions from work during certain periods of pregnancy and confinement. But nothing has so far been done in other provinces. Sickness benefit is of course unknown in India, with the result that sickness not only entails additional expenditure (and ultimately indebtedness) with all its evil consequences but sometimes results even in loss of job. Compensation for injury or loss of life now stands on a different footing. Up till 1923 an employer could be sued for compensation only in cases of fatal accidents; but in that year the first Workmen's Compensation Act was passed and the liability of employers in the matter of compensation for injuries received by workmen while on duty was recognized. A definite scale for compensations of various kinds was provided, and machinery for dealing with claims was set up. The working of the Act revealed a number of defects in its provisions: among other things it was found that compensation was held back for varying periods and that in the case of disputes with regard to the scale of payments there was no authority (except the expensive law courts) to arbitrate and to expedite payments. Moreover, the

Act made unjust discrimination against workmen engaged in certain industries and occupations. The Act was accordingly amended in 1929 and 1931, but the Amending Acts only widened the scope of the Act of 1923 and did little towards removing the various evils associated with the actual payment of compensations. The Whitley Commission made a number of recommendations for enlarging the scope of the Act and effecting improvements. The result of these recommendations was the Amending Act of 1933. By this new Act all classes of industrial workers are brought within the scope of compensation schemes, the waiting period has been reduced, and the scales of compensation for death and permanent total disablement have been considerably enhanced and the minimum rate introduced represents an increase of over 100 per cent. on that given under the original Act, while the maximum has been increased by 60 per cent. The basis of calculation of the amount of compensation in the cases of death or permanent total disablement is 30 months' wages for the former and 42 months' wages for the latter for adults. The maximum amounts of compensation for death and permanent total disablement have been increased by the New Act from Rs. 2,500 and Rs. 3,500 to Rs. 4,000 and Rs. 5,000 respectively. In the case of minors the maximum compensation for death stands at Rs. 200 as before, while the maximum compensation for permanent total disablement has been fixed at Rs. 1,200 as against 84 months' wages or Rs. 3,500 (whichever is less) in the original Act.

The subject of unemployment insurance may be dismissed with the remark that nothing has so far been done in this direction, and that even the Labour Commission had no constructive proposal to offer in this connection. No provision for provident and pension funds has been made anywhere except by the British India Corporation of Cawnpore, the Carnatic and Buckingham Mills of Madras and the Empress Mills of Nagpur. As regards the provision of facilities for amusement and recreation the less said the better. The importance of these two activities as character-building forces has been recognized

the world over, but even in this respect India is woefully backward. No concerted and organized effort has so far been made (except at Jamshedpur, Nagpur and Madras) to interest the factory worker in these aspects and activities of life. The result is that to a vast majority of workers, drinking is the only recreation and idle gossip the only amusement.

The Trade Union Movement. The various deficiencies and shortcomings noticed in the preceding paragraphs are not entirely due to the apathy of the employer or the State: the worker himself is to a certain extent responsible for these deficiencies. It is the labourer who must take the initiative in the matter of reform; and in order to make his demands effective he must appreciate the necessity of combination and united action.

In every country in the world the introduction of the factory system has been followed by the organization of workmen, often in defiance of the laws of the land, into societies to protect themselves against capitalistic aggression and to improve their condition by acting collectively in cases of emergency. But in India trade unionism did not make any appearance for nearly three quarters of a century after the introduction of the factory system. Trade unionism in India may be said to have been born in the year 1018. Previous to that year the Amalgamated Society of Railway Servants of India and Burma, the Bombay Postal Union and a union of warpers in the Ahmedabad Cotton Mills were the only labour organizations in the country, and even these in spite of their high sounding names were by no means a force of any significance. It was in April, 1918, that the first militant type of trade union was formed in Madras. According to the Memorandum submitted by the Madras Labour Union to the Whitley Commission, this union had its origin in the fact that "the workers began to feel the pressure of high prices during the latter part of the war and the frequency with which assaults took place inside the mills." Similar circumstances were responsible for the spread of the movement to Bombay and other industrial centres; and

by the end of 1920 almost every industrial centre in the country had a number of labour organizations. Most of these unions were, however, merely strike committees brought into existence to conduct certain strikes and became moribund as soon as their immediate purpose was served, until another strike in the trade broke out. There was a definite check to the movement during the following few years, but in spite to this temporary set back the movement has on the whole come to stay, and in recent years has shown signs of life and vitality. Some idea of the strength of the movement may be had from the fact that during the year ending March, 1933, there were 170 registered trade unions in British provinces with 237,359 members. When we add to this the unregistered unions and the unions operating in Indian States (for which no data are available but which from all accounts available are much stronger associations than the so-called registered unions) it becomes obvious that the number of trade unionists in India is much larger than that indicated by the above figures.

Along with the establishment of local unions, the "federation movement" has also come into existence. A central organization known as the All-India Trade Union Congress was set up in 1920, and more or less simultaneously labour federations or central unions were established in various parts of the country. But the organization of these trade unions is not so sound and extensive as their high-sounding names or their geographical prefixes would imply. Their coffers are empty; their paying members are few; their executive bodies exercise little control over their members. Again, their membership is unstable and volatile, being liable to violent changes according to prevailing moods and economic conditions. Their chief function seems to be to rally the workers for strikes, and (considering the weeknesses of their organization) they perform this function with admirable efficiency. Their authority and influence over the workers belonging to any particular industry is manifested only in times of strikes when the non-members participating in the struggle easily outnumber the members of the trade unions concerned. These facts show that the existing trade unions have a much wider sphere of influence than that indicated by their actual membership.

This great progress has been made in spite of various adverse factors, such as the ignorance of the workers and the hostility of the employers and the State towards them. The ignorance of the labourers and their supine indifference towards their own problems has necessitated the intervention of men from the non-labouring classes in their interests, indeed it is on account of the leadership of these men that the trade union movement has been developed to its present extent in India. As regards the hostility of the employers, the evidence given before the Royal Commission and the various coercive methods employed by them to prevent workers from appearing before the Commission provide conclusive proofs as to their real attitude towards trade unionism.

To the Government even honest straightforward trade unionism has been like a red rag to the bull. In these activities the Government scents a bolshevist revolution, and naturally it · has done everything seemingly constitutional to reduce it to a state of utter impotence. The legal position of trade unions is based on the Act of 1926. Under this Act the registration of trade unions is not obligatory, but it confers certain privileges on the registered unions which unregistered bodies do not enjoy. The Act provides that not less than half the office-bearers of a registered union should be persons employed in the industry to which the union belongs. The Act compensates for this restriction by granting immunity from criminal liability to the union officials for furthering the legitimate activities of the unions. The officials of unregistered unions, on the other hand, do not enjoy this privilege. But while the Act of 1926 grants these illusory privileges, the Trade Disputes Act of 1920 takes them away to a large extent-in fact its certain provisions tend to turn even registered trade unions into a species of Government controlled debating societies. According to this Act strikes in public utility undertakings are declared unlawful, except when they are conducted under certain well-defined conditions. Again strikes that are calculated to inflict general hardship

upon the community are declared illegal, though they were already punishable under the Indian Penal Code. And lastly, even sympathetic strikes are declared illegal under this Act. Not being content with this direct legislation, the Government is never reluctant to put the ordinary criminal law of the country into operation against the leaders of the movement for their subversive activities against the State,—and it is never difficult to prove any spoken word or action as tending to be subversive in its effects. The fact is that the Government regards the intervention of non-labouring classes in trade union matters with disfavour—unless these outsiders happen to be of a particularly harmless and passive type—well knowing that the movement would be badly crippled and would cease to be effective without the leadership of men from the so-called upper classes.

While the factors described in the foregoing paragraph have been mainly responsible for arresting the growth of trade unionism in India, there are also factors which tend, in varying degrees, to bring about the same results, and these are the cosmopolitan character of labour in Industrial establishments, the semi-permanent character of the labourer's connection with industry and his reluctance to contribute (owing to his extreme poverty and the microscopic size of his earnings) regularly to trade union funds. Illiteracy is obviously the root-cause of all these evils, so that until this cause is removed, and also until the employer and the Government do not change their attitude towards trade unionism as a whole, we must not expect any rapid improvement in the situation.

Efficiency of Labour. In spite of the great social and economic importance of the subject, no effort has so far been made to measure the efficiency of labour in various centres and industries. Obviously it is not sufficient to proclaim the self-evident fact that, in so far as production per head is concerned, the labourer in India is vastly inefficient in comparison with Western and Japanese labourers. What is needed is a comparative study and an exact statement of facts not only in connection with output per head but also regarding the cost per

unit of work done and the quality of articles produced. But as in regard to all these items no data are available, we are not in a position to say exactly how the productive efficiency of Indian labourer compares with that of the workers in foreign countries against whose products Indian manufactures have to compete. However, a rough sort of idea may be had by means of manipulating some ordinary facts and figures which were put before the Labour Commission in connection with certain representative industries.

Let us take the cotton mill industry first. According to the evidence of the Cotton Yarn Association before the Labour Commission, 18 Japanese operatives attend to 1000 spindles on an average while in India 30 operatives are required for the same number of spindles. Again a tenter in England attends to three sides and in Japan to two, while in India he attends to only one, except in some of the mills in Ahmedabad where tenters attend to two sides. The figures for the weaving section of the industry are more confusing; weavers in different centres and mills attend to one, two or three looms and in Madras they attend to six automatic looms. In these circumstances it is not possible to form an idea in regard to the average number of looms per operative in India. However, as against these figures we have the average of 5.5 looms and 4 looms per operative in Japan and England respectively. In the jute mill industry, according to the evidence given before the Whitley Commission by the Jute Mill Association, on an average two operatives are required in India as against one in Dundee and various continental centres for the same amount of work. the steel industry, according to the evidence offered by the Tatas to various Tariff Boards, nearly 5 men are required in India as against one in Europe to do the same amount of work. In the tin-plate industry, the evidence offered to the Labour Commission revealed that on an average 2.8 men in India are equal to one in Wales. In the coal-mining industry the figures for production per head reveal that the underground worker in India is about as productive as the worker in England and Germany in spite of the lack of up-to-date mechanical appliances for coalcutting in India. And lastly, investigations carried on personally at Cawnpore by the writers revealed that in the leather tanning industry on an average 2 workmen do the same amount of work as one in Britain, while in the shoemaking industry the disparity between the British and Indian workmen's productive efficiency is even smaller.

Even if we accept the above figures (which incidentally have been supplied by employers themselves, and which mostly belong to protected industries) as the basis of calculation, we must come to the conclusion that on an average not more than 2.5 workmen are required in India to do a given amount of work against one in Britain. The question arises: how does the cost of labour in India per unit of article produced (which from the competitive point of view must be the final object of measuring efficiency) compare with other countries? We have seen that on an average Indian skilled and unskilled labourers are not paid more than a quarter of what the average British workman receives in wages. In these circumstances the labour cost per unit of article produced must be substantially lower in India than in Britain-except in the case of a few highly specialized branches of industry. And the same conclusion would be applicable in regard to various continental countries and the United States. But on the other hand these conclusions would not be applicable to the competitive position of Japan where labour, especially in the cotton mill industry, is strikingly efficient (in some sections of the industry even more efficient than British labour), where money wages are not correspondingly higher, and where climatic conditions are more suitable for factory work than in India.

Causes and Effects.

Existing conditions: a recapitulation. So far we have confined our attention strictly to the statement of facts without in any way trying to explain their implications and interconnection. Before, however, we proceed with the latter task, it seems desirable to recapitulate as briefly as possible some of

the more important facts and conclusions arrived at in the preceding pages, which are as follows.

There are very few permanent industrial workers in India: the great majority of those engaged in industries take up work in factorics for varying lengths of time and never fail to avail themselves of an opportunity of returning to the village. They are generally employed through the agency of recruiting agents whom they have to pay for keeping them in employment. These factory workers are generally illiterate, so that their intellectual capacity for work is comparatively poor. But very little is being done to make up this deficiency by general and technical education. Their standard of living is deplorably low, their housing arrangements are in a scandalous condition both as regards accommodation and sanitation—in fact they are in many respects distinctly inferior to those in the village. The atmosphere in mills and factories is extremely depressing both mentally and physically, while the hours of work are generally at par with those in most of the Western countries. average earnings of an Indian industrial labourer are less than a quarter of the average earnings of a Western factory worker, though they compare less unfavourably with those of the Japanese factory workers. There are long and annoying delays in the payment of wages, and on top of this appreciable amounts are taken away in fines. Very little is being done by way of improving physical, intellectual and moral standards it is only in a few exceptional cases that hospitals, play-grounds, libraries, schools and various facilities for amusements have been provided. Even sickness allowances are practically unknown. The functions of trade unions are still imperfectly understood, they are more or less a sort of permanent strike committees, and even as such there is considerable room for their expansion. The standard of productive efficiency is also low: on an average nearly 2.50 Indian workmen are equal to one British worker. And to this we may add at this stage the two well-known facts which have not been explicitly stated hitherto: that physically the Indian factory labourer compares very unfavourably with foreign workers, and that climatic conditions in India are too unfavourable for sustained physical and mental effort.

Causes and effects. The various features of industrial life in India as summarized above are by no means isolated phenomena: they are the most intricately connected parts of a complex whole, acting and reacting upon one another in a most baffling manner, so that none of them can be studied without direct or indirect reference to the rest. In these circumstances it would not be possible to study the various problems without frequent repetitions.

We might begin our analytical study at the source. The fact that only a small proportion of workmen have so far been permanently industrialized and that industry in India is to an overwhelming extent dependent on the village for the supply of labour is at once the cause and effect of many important and difficult problems. The migratory character of labour is due to many causes, of which the inherent love of the worker for old familiar surroundings, the difficulties of getting suitable housing accommodation, and consequently the lack of social amenities are the most important. When the absence of suitable housing facilities compels the worker to leave his family behind in the village, it is not to be wondered at that he has to visit them as frequently as possible. Again, overcrowding and disregard for sanitation in the centres of industry combined with the depressing atmosphere of the factory itself tend to make him a physical wreck and so, often against his will, necessitate his departure. The consequences of these practices are that the supply of labour is not constant and that long breaks and consequent lack of concentration tend to make the labourer inefficient.

The intellectual backwardness of the worker, which is the direct outcome of illiteracy, has a long trail of direct and indirect consequences; but to take a few, it is a great stumbling block in the way of the development of skill; it is one of the major causes of the low standard of living; it prevents workmen from realizing their obligations and responsibilities; it deprives the labourer of the various social and economic advantages of combination; and all these are in varying degrees responsible for the inefficiency of labour.

The difficulties connected with housing are the most fruitful cause of various evils associated with industrial life in India. Lack of sanitation and overcrowding bring disease and death so that they affect not only the supply of labour but are also instrumental in lowering its productive efficiency by destroying the worker's stamina. Furthermore, they act as a deterrent to those who might have otherwise become permanently industrialized. And, finally, they bring about the stagnation of will and effort to improve the standard of living.

And the low standard of living itself is the cause of many an evil: it destroys ambition, it gives rise to unclean and insanitary habits, it brings disease and loss of staying power, and all these combined result in the loss of efficiency.

As nothing has so far been done to ascertain the optimum in regard to the hours of work (where the productivity of labour would reach the maximum), it cannot be said whether even from the productive point of view the hours of work as fixed by the Act of 1934 (54 per week and 9 per day) are not unnecessarily too long. As the worker's staying power and stamina are weak, and as the atmosphere in Indian industrial establishments is (owing to climatic and other reasons) far from congenial, the worker, finding himself unable to labour for too long, is compelled to seek relaxation either in loitering or in absenting himself altogther from his work. But in spite of these devices his already weak vitality deteriorates further under the pressure of long hours of work, so that not only his working capacity and efficiency suffer, but he is actually compelled to go to his country home for varying lengths of time to recuperate his health. It also tends to lower his standard of living inasmuch as he has no time and energy to devote to the finer sides of life.

All the three above-mentioned tendencies, viz. deterioration of physique and vitality, inefficiency and low standard of living cause and are also caused by the low scale of wages. There is

a good deal of truth in the factory-owner's contention that an increase in wages, far from improving the worker's standard of living, actually results in increasing absenteeism. The reason is obvious: a rise in wages creates a desire for obtaining what the labourer needs more than the ordinary material comforts of life—leisure and rest. The conclusion is obvious: the efficiency of the worker cannot be improved without at once improving his standard of living by increasing his wages and reducing the hours of work. But when wages are paid after long intervals, the adverse effects of their being low are intensified manifold. He is compelled to borrow money at exorbitant rates of interest, which means a corresponding reduction in his low wages. The result is that there is a further fall in the standard of comfort; and so, via the loss of vitality and staying power, it leads to inefficiency and sometimes migration.

The inadequacy of arrangements for the treatment of the sick has far-reaching consequences. Many workmen die because of inattention during the initial stages of illness, and those who survive are generally too weak and exhausted to work efficiently in the depressing factory atmosphere. And the absence of sickness allowance aggravates his difficulties more than the sickness itself: he has to borrow money, and this additional burden often breaks his back completely. The result in both cases is that labour becomes inefficient and scarce. And the same is true of maternity benefits, because child-birth puts a woman in exactly the same position as a serious illness does to an ordinary worker, male or female—only it is more important, because in this case two generations of workmen are concerned at the same time.

The absence of strong, well-organized trade unions is at once due to, and to a certain extent is the cause of the backward mentality of the worker with all its wide and far-reaching consequences. If the factory worker in India lacks discipline, it is as much due to his inborn inclinations as to the absence of the guiding influence of trade unionism; if he negects his duties it is partly because he has not the moral force of a trade union to control his action; if his mental faculties are not given a chance to develop, if he is resourceless in times of poverty or illness, it is partly because he has himself failed to take the initiative through the collective agency of trade unionism.

The efficiency of Indian labourer is also adversely affected by the climatic conditions prevailing in India as well as by his poor physique. The heat exhausts the worker quickly and so adversely affects his efficiency. The physical inferiority of the worker produces exactly the same results as unfavourable climate. This inferiority is due to a variety of causes, of which racial affinities and characteristics, social customs, unwholesome climate, unbalanced and inadequate food and low standard of living are the most important. In this case, as indeed in many others, a vicious circle is created, physical inferiority lowers efficiency, low efficiency results in low wages, and low wages are detrimental to the improvement and even the maintenance of physical fitness.

Remedies.

The vicious circle. From what we have said in the preceding paragraphs it must have become abundantly clear that there are three main problems which we have to tackle in connection with industrial labour in India viz., problems relating to low efficiency, low wages and low standard of living. They are not only affected by a number of subsidiary factors but are themselves interconnected very closely. Thus low efficiency is due to, as well as, causes low wages and low standard of living; low standard of living makes the worker content with lower wages and thus deteriorates his efficiency. In these circumstances the question arises: how to break through this vicious circle? It can obviously be done by storming this stronghold of causes and effects on all sides, and not by trying to break through by stages.

To begin with, the difficulties connected with the migration of labourer to the village (which is a potential cause of inefficiency and low standard of living, and consequently low wages) must be solved satisfactorily. The Royal Commission on Labour, after a somewhat superficial examination of the require-

ments of industries and labour in India, recorded their verdict in favour of actually encouraging migration on the ground that it enables the worker to recuperate his health and vitality, that it provides a sort of insurance against the adverse consequences of illness and unemployment, and that it spreads enlightenment in rural areas. There is no doubt that under the prevailing conditions nothing would be gained by making the worker sever his connection with the village, but then it is equally true that the severance of that connection would be physically impossible so long as circumstances do not change, and immediately the desired change is brought about, the severance of the worker's connection with the village would automatically follow, indeed it would be impossible to prevent it. Again, in recording the above verdict the Commission hardly took into account the requirements of industries themselves: migration under the prevailing conditions undoubtedly improves quantitative efficiency, but it deteriorates skill in the haudling of machinery and materials and as such lowers efficiency from the qualitative point of view. The maintenance and improvement of qualitative efficiency, therefore, demands that migration to the village should be discouraged as far as possible.

But as we have pointed out above, we must not expect the worker to sever his connection with the village or indeed even to make his trips less frequent so long as conditions in industrial centres remain what they are to-day. In other words, if the worker is to give up migration, the causes leading to it must be removed. These causes are the unhealthy atmosphere in the factory, lack of adequate housing facilities, the prevalence of insanitary conditions in the working class districts, low wages, long hours of work, lack of education and the absence of games and amusement facilities etc. As long hours of work in the dirtridden atmosphere of factories cause illness and eventually migration for recuperation, a more rigid control over factory sanitation and further shortening of the hours of work would automatically make visits to the village less frequent. Similarly, as the inadequacy of housing facilities compels the worker to leave his family behind, and as the dirt and squalor of working class

tenements put him straight into the arms of ill-health and disease, improvements in these fields would naturally bind him more securely to the industrial centre. Higher wages combined with shorter hours of work would improve his standard of living and banish disease. Similarly education would tend to make him a better worker, instil ambition and improve his standard of living. And lastly, games and facilities for amusements etc. would make him take his new surroundings more kindly and not to regard them as a necessary evil. If improvements in all these directions are introduced, there is reason to believe that the problem of migration would in a short time cease to be a bugbear to the Indian employer, and an army of permanently industrialized workers would gradually come into existence.

The permanent industrialization of the worker and the various reforms leading thereto would automatically improve his standard of living. But to maintain that standard higher wages would be necessary, which the worker would not be in a position to command without showing a corresponding improvement in his efficiency. Better housing facilities. improvements in the conditions of work, general education, and greater attention to sanitation in the working class districtsfactors which are necessary for industrializing the labourer permanently--would also go a long way towards making the factory worker more efficient; but in order to get the best out of him it would be necessary to arrange for the prompt and full payment of wages, to make better arrangements for technical education and training, to provide adequate medical facilities, and above all to make him conscious of his needs as well as his rights and obligations which have an indirect bearing upon efficiency. If and when these reforms are introduced, the worker's standard of living and efficiency would improve, and this improvement would be reflected in a rise in his wages.

From what we have said in the foregoing paragraphs it must have become abundantly clear that in order to tackle the inter-connected problems of low standard of living, low

efficiency and low wages it would be necessary first to provide better housing facilities, to improve sanitation within the factory and in the areas occupied by working class tenements, to provide more adequate facilities for general and technical education, to improve the arrangements for medical relief, to provide games and amusements for workers and their children. to pay wages more promptly, to cut down the hours of work and to organize trade unionism. The question arises: how to tackle all these problems simultaneously? The Whitley Commission chalked out a practicable programme of action embracing all these fields, and divided the responsibility for action between the employer and the State. But although it is more than four years now since the Commission's report was published, nothing has so far been done except in the direction of improving conditions in the factory, reduction of the hours of work and greater promptness in the payment of wages; and, as we have seen, even measures dealings with these problems are half-hearted and extremely inadequate to meet the requirements of the situation. And we repeat that so long as all the anomalies in various fields are not removed, no improvement in the condition of labour and consequently industry itself would be possible. It is, as pointed out by the Labour Commission, the duty of the State to take initiative in the matter by legislation and executive action; but, to hit the nail on the head, it must be said that before the long list of changes discussed above can actually be introduced, the whole attitude of the Government will have to change radically.

But it must not be supposed that if and when the various reforms suggested above are introduced, the Indian labourer will find his economic condition at par with that of European and American workmen. As his physique will always compare unfavourably with that of the Western labourer, and as climatic conditions will always be unfavourable to prolonged physical effort, his productive efficiency will always be inferior to that of the workers in temperate regions. But this inferiority of workmen would not adversely affect the ability of employers in India to compete with foreign countries as the wages of

labour will be correspondingly low. Nor would the worker suffer hardships in consequence as, owing to climatic reasons, his expenditure on food, clothing and shelter will be smaller than that of workmen in colder countries.

CHAPTER XVI.

TRANSPORT.

I. Introductory

Social and Economic Importance of Transport. It is well-known fact that the process of production not complete till the commodity is in the hands of the consumer. Thus transport is a part of production in the sense that unless commodities can be brought to the consumer their production cannot be justified. It is obvious that means of transport assume greater importance with centralized production and regional specialization: indeed, centralized production and regional specialization are themselves rendered possible only after the provision of transport facilities, and the extent of centralization and specialization depends upon the adequacy of transport facilities available. But in forming an estimate of the bearing of transport on production, and consequently the well-being of a nation, we must also take into account its effects on the mobility of capital and labour which shape productive organization and consequently production itself. Again, the provision of adequate transport facilities mitigates the effects of such natural calamities as floods, earthquakes, droughts and consequent famines and pestilences. Further, the provision of transport facilities encourages travel and so breaks down conservatism and spreads tolerance and enlightenment among the people. And lastly, an efficient system of transport is always a great political and military asset: it breaks down isolation and brings about unification; it is an essential requisite for the conduct of military operations.

The Requisites of an Efficient System of Transport. Under the system of specialization and centralization of production, all sorts of commodities have to be carried from place to place: there are perishable and non-perishable goods;

there are heavy goods and light goods; there are, relatively to their bulk, move valuable goods and less valuable goods. The system of transport that has to carry all these different varieties of goods must obviously satisfy different kinds of requirements; but there is one rule which covers the requirements of all transportable goods, and it is this that the system of transport taken as a whole must be adequate and efficient. And in order to be efficient the system of transport must ensure cheapness, quickness and safety. In studying the transport problems of India, therefore, we will have to see how far the existing means of transport are adequate to meet the requirements of trade, industry and agriculture, how far they conform to the recognized standard of efficiency, and how improvements may be affected.

Different means of Transport and their Co-ordination. There are four possible means of transport: railways, inland waterways and coastal and oceanic shipping.* All these when taken together form a country's transport system as a whole, though individually they may serve different purposes. The railways are essentially a vehicle for long distance traffic, and they serve as feeders to ports (oceanic and coastal shipping) as well as roads, and are themselves fed by roads and ports. Roads are meant primarily for short distance traffic and they feed and are themselves fed by railways and inland waterways. Inland waterways may be used both for long and short distance traffic, and may serve as feeders to, and may in turn be fed by, roads. Thus it will be seen that railways, roads, shipping and inland waterways are closely inter-connected and inter-dependent; from which it follows that in developing the transport system of a country the co-ordination of activities in these various fields is of the utmost importance. We shall now proceed to see how far these different means of transport have been developed in India and

^{*} There is also aerial transport, but as at present it is not of much economic importance, we have left it out of account.

what their position in the general scheme of economic organization is at the present time.

II. Roads and Road Transport

The Development of Roads in India: A Historical Survey Before the advent of the British, and long afterwards, little attention was paid in India to the problem of transport. In the plains of the north the great perennial rivers were the natural highways for the transport of goods, and the rulers of the country seem to have been satisfied with these facilities. The Moghuls no doubt built some roads in the north-western provinces; but these roads were constructed chiefly for strategic purposes, and as such were far from adequate to make any impression upon the economic organization of the country. Thus for long distance traffic and to a minor extent for short distance traffic the river transport was utilized, while the bulk of the short distance traffic was conducted along unsurfaced roads on pack animals and carts. In the south, on the other hand, there were no perennial rivers and metalled roads of any description so that for the entire short-distance traffic in goods pack animals were used, while for long distance traffic partly the sea and partly land transport agencies were utilized. Thus when the British assumed the control of India, they found that the development of roads in the country had hardly yet begun.

Nor did the new rulers of India make any serious effort to make up the deficiency during the earlier stages of their rule. It was not till after the first quarter of the nineteenth century that the construction of metalled and bridged trunk roads connecting the more important military centres (which also happened to connect some commercial centres) was started under the supervision of military engineers. Thus it would appear that the object underlying these early developments was military security; and if the newly constructed roads also helped commerce, this change must be regarded only as a bye-product. However, Lord Dalhousie (1848-55) suppressed the Military Board which was supposed to look after public works, and handed over its duties to a newly

constituted Department of Public Works. "The expenditure on public works, which had been on the most niggardly scale, was enormously increased, and works of great magnitude, were undertaken."*

The Government was faced with an entirely new set of problems when the programme of railway construction was inaugurated during the fifties of the last century. railways had to "earn a living" as far as possible, and this they could do only if the countryside was opened up simultaneously to enable them to draw upon outlying areas for traffic in goods and passengers. This again could be done only by the construction of feeder roads. Furthermore, with the construction of railways the necessity of constructing and maintaining strategic roads connecting different parts of the country no longer existed. So with the advent of railways "attention was concentrated on the construction of feeder roads at right angles to them, and the trunk roads, especially where parallel to the railways, were in some cases allowed to go out of repair. There was a great increase in metalled feeder roads and roads of local importance. Sir Richard Temple in his 'India in 1880' estimates that there were in that year not less than 20,000 miles of metalled and partially bridged roads in India."+

Indian Roads at Present. The policy of road construction which was adopted with the advent of railways has been followed up to the present day, so that the construction of new railway lines has been followed by the construction of new metalled and unmetalled roads. In 1931-32, the latest year for which statistics are available, there were 264,512 miles of roads in British India, of which 74,541 miles were metalled and 189,971 miles were unmetalled. Of this total 27,634 miles of metalled and 21,044 miles of unmetalled roads were maintained by the Public Works

^{* &}quot;The Oxford History of India," by V. A. Smith, p. 707, quoted by the Indian Road Development Committee.

[†] See Report of the Indian Road Development Committee, p. 9.

Department; 37,377 miles of metalled and 162,027 miles of unmetalled roads were maintained by district and local boards; 9,530 miles of metalled and 6,900 miles of unmetalled roads were maintained by municipalities (including cantonments, notified areas and townships). As in 1913-14 there were about 50,000 miles of surfaced roads in British India, it follows that during the last 20 years metalled roads have increased by about 50 per cent.

How inadequate the roads in India arc to meet the requirements of the country will become apparent when it is remembered that the area of British territory alone amounts to 1,096,171 miles, and its population according to the 1931 census stands at 271.5 millions. It will be seen that on the basis of the above figures British India has only 6.8 miles of surfaced roads and 24.10 miles of both surfaced and unsurfaced roads per 100 square miles of area. Compare with this the road mileage in a vast and sparsely populated country like the United States. There, according to the Indian Agricultural Commission, surfaced roads and roads as a whole showed the fine average of 12.05 miles and 80 miles respectively per 100 square miles of area.

The quality of even such roads as are available is far from satisfactory. Most of the metalled roads, excepting some of the trunk roads, are in a hopeless condition—so much so that motoring on them is universally regarded as an extremely perilous occupation. As regards unsurfaced roads the less said the better. They are generally undrained and unbridged tracks; and while in the dry season they are difficult to negotiate on account of heavily ploughed, uneven surface, during the rainy season they are converted into veritable lakes of mud and are thus altogether unsatisfactory.

Road Transport. The means of road transport are in keeping with the condition of roads in the country. From times immemorial the bullock cart has been used for transport purposes in India, and even to-day it is by far the most important means of transport in the country. Even the form or external appearance and construction

of the vehicle do not appear to have undergone any appreciable change during the countless centuries, Motor transport has no doubt invaded Indian roads since the war. but its activities are confined to the large centres of industry and commerce; and as even there it finds in the bullock-cart a formidable competitor, we would not be far wrong in concluding that more than 99 per cent of transportation by road is effected by means of bullock-carts. Transportation by bullock-carts is much cheaper than mechanical transport—a recent estimate puts it at about one-sixth of the latter; for the carriage of ordinary raw materials and agricultural products it is as safe as mechanical transport during the dry season, and it is in the dry season that most of the marketing operations are performed by the agriculturist. The bullock-cart, however, does not satisfy the third condition of efficient transport, viz., quickness. But in the case of rural marketing time is seldom at a premium, and when it is (as in the case of marketing fruits and vegetables) steps are always taken to overcome this handicap as far as possible. However, the cheapness of bullock cart transport is so pronounced and the users of road transport are so poor that it is not possible to take any serious notice of its various drawbacks.

Consequences of the inadequacy of Roads. The inadequacy of roads of all kinds in general and of metalled particular has far-reaching effects on economic condition of the masses in India. Agriculture is India's premier industry, and nearly eighty per cent of the population of the country is directly or indirectly dependent upon agriculture. In the absence of good and adequate roads, the cost of transporting the agricultural produce to the marketing centres and from there to the railways (for export and consumption in towns) increases, and as the price of staple products is governed by world prices, the price realized by the agriculturist for his products goes down in proportion to the rise in transportation costs, which naturally multiply in the absence of a good system of roads. These facts give us a fairly good idea regarding the extent to which the inadequacy of good roads must be responsible for cutting down the purchasing power (which even with good roads would be extremely low) of the agriculturist still further. But the evil does not stop here. The rural population has to obtain the supply of a large number of commodities, which are not locally produced, from towns, and in the absence of good roads the cost of transporting these articles (many of which are used in productive operations) goes up, so that serious inroads are made into the slender means of the villager. The cumulative effect of all this is a fall in productive efficiency, which means the deterioration of the agriculturist's economic condition. Again, when roads are bad and inadequate, the manufacturing industries, dependent as they must be ultimately upon the rural population, cannot make much headway. And lastly, the inadequacy of good roads discourages travel as effectively as it discourages the exchange of commodities, partly owing to the discomfort involved and partly by reacting upon the economic condition of the people and thus putting travel beyond their reach. The need for more and better roads thus becomes manifest.

Road construction policy during recent year. bearing of road development upon the general economic development of the country was not fully appreciated until recently. Since the war both the provincial and central Governments have been more appreciative of the needs of the country in the matter of road development, with the result that they are now committed to the policy of providing more and better roads. In pursuance of this policy the provincial Governments have been allocating larger amounts to the construction and maintenance of roads. As far as Government of India is concerned, the change in policy dates from the year 1927 when in accordance with the Resolution adopted by the Council of State, a Committee was appointed-(1) to examine the desirability of developing the road system of the country and, in particular, the means by which such development could most suitably be financed, and (2) to consider, with due regard to the distribution of central and provincial function, whether it was desirable that steps should be taken for the co-ordination of road development and research in road construction by the formation of a Central Road Board or otherwise. It is on the recommendations of this Committee that the road construction policy of the Central and Provincial Governments is supposed to be based at the present time.

The recommendations of road development committee. The Committee gave it as their opinion that the development of roads in India was desirable for the better marketing of agricultural produce, for the social and political progress of the rural population, and as a complement to railway development. Finding that the inadequacy of the financial resources of provincial Governments and local bodies was the root cause of the undeveloped state of roads, the Committee recommended that an additional duty of 2 annas per gallon should be imposed on motor spirit, and the proceeds of this additional duty should be distributed among the various provinces according to their petrol consuming capacity after a deduction of 10 per cent. by the Central Government for its own purposes. Further, they recommended that the possibility of obtaining additional revenue for road construction purposes by enhancing vehicle tax and licensing fees should be explored by provincial Governments. The funds from the above sources were to be spent on the construction and maintenance of main roads chiefly for the benefit of motor transport. As regards the allimportant village roads, the Committee merely expressed the pious hope that they "should benefit indirectly by the release of provincial revenues and local funds which are now being spent on main roads to meet the requirements of motor transport," and that "in view of the importance of village roads in the general scheme of communications, it is hoped that they will receive more attention and larger grants from local Governments and local bodies in future." The Committee did not consider the appointment of a Central Road Board with executive powers for administering a separate road fund as desirable, and instead recommended that a periodical Road Conference, consisting of the Member of the Governor General's Executive Council in Charge as Chairman, the members of the standing Committee of the Indian Legislature for Roads, representatives of the Departments of the Government of India concerned with roads, representatives of local Governments and, if so desired by them, of Indian States, should meet from time to time to discuss subjects of common interest, and might appoint sub-committees to examine questions of a technical character and report to the Conference.

Results of new road policy As has been pointed out above. recommendations of the Road Developthese Committee accepted hv the Government Were ment of India, and they now form the basis of the Central and Provincial Governments' road policy Accordingly, in April 1929, the duty on petrol was increased from a annas to 6 annas per gallon, which has ever since been yielding an additional revenue of nearly Rs. 1 crore a year. This amount has been distributed among the various provinces and the Central Government according to the principle laid down by the Road Development Committee. Further, the first Road Conference was called in April 1030, and a Road Congress comprising delegates from British India and Indian States (who were mainly road engineers) held its first meeting at New Delhi in the spring of 1934 to deal with various technical matters in connection with road construction in various parts of India.

But in spite of all these activities singularly little has been achieved in the realm of actual road construction over and above what might have been done without those extraordinary measures. In 1928-29 there were 67,424 miles of metalled roads and 178,472 miles of unmetalled roads in British India. By 1929-30 the mileage had increased to 70,721 and 183,406 respectively—a rate of progress which had been maintained during the previous four or five years. In 1930-31, the first year when funds from the enhanced petrol duty were available for road construction, there were 74,048 miles of metalled roads and 179,089 miles of unmetalled roads, which shows (1) that the attention of the authorities was concentrated upon metalling

the existing unmetalled roads, and (2) that while progress in the direction of metalling was just maintained, operations in connection with the extension of unmetalled roads actually came to a standstill. In the following year (1931-32), the latest year for which official data are available, the extension of unmetalled roads was undertaken but at the expense of metalling operation, as we find that the length of metalled roads in that year stood at 74,541 miles and of unmetalled roads at 180,071 miles. The quality of road surface, however, is claimed to have undergone some improvement during these years. From these facts we must draw the obvious conclusions that the proceeds of the extra duty on petrol have been spent on improving the existing surfaced roads for the benefit of the petrol driven road vehicle, that contrary to the expectations of the Road Development Committee, the diversion of provincial funds from main roads to local roads has not taken place, and that, in consequence, as far as the extension of metalled and unmetalled roads for the benefit of the rural population is concerned, no progress was made during the first three years of the adoption of the new scheme.

We have seen in connection with handicrafts that, as a counterblast to Mahamta Candhi's village uplift movement, the Government of India distributed Rs. 1 crorc in 1935 among the various provinces for rural uplift. The provincial Governments have already announced their intention of spending a part of this grant on the improvement of village roads. But the magnitude of the rural transport problem is so enormous and the amounts doled out by the provincial Government for road construction are so small that we need not wait for the results of Central Government's philanthropy.

The Problem and its solution. We have seen that India is inadequately supplied with roads of all descriptions and that the quality of the existing roads is far from satisfactory. If India is to advance economically, and if the condition of the masses is to be improved, the problem of road extension and improvement will have to be tackled more seriously and systematically. Moreover, if

the railways are to be maintained as a profit earning proposition by the State, more and better roads will have to be constructed to feed them. It is not difficult to see that at the present rate of progress more than half a century will be required to metal the existing unmetalled roads. problem of transport in India would not be solved until the road length is increased by at least 400 per cent. and possibly much more. It follows that, as things are moving at the moment, India will have to wait till doomsday for the solution of her transport problem. When seen from this angle of view it would appear that the Road Development Committee, on whose recommendations the road policy of the Central and Provincial Governments appears to have been based, were pursuing the ideal of building roads for the special benefit of the motorists, and were woefully lacking in constructive ideas in connection with the more urgent problem of rural transport.

The difficulties in the way of road development are essentially financial in character. To put it in a nut-shell, the administrative machinery of both the Central and Provincial Governments is, as will be shown in a later chapter, so topheavy that, in spite of the fact that all the available sources of revenue are already being exploited to the full, little is available for nation-building activities. As the country is already being taxed to the limit of brining production to a standstill, it follows that no appreciable progress in the direction of road construction would be possible without a drastic pruning of administrative expenditure. The capitalization of revenues allocated to road construction and consequently the financing of road development by means of borrowed capital may at first sight appear to be a suitable alternative to financing road construction with ordinary revenues; but on closer examination it would appear that even this method is not likely to go very far towards meeting the enormous requirements of the country. There is no doubt that the development of roads would indirectly lead to an improvement in the revenue earning capacity of the State, and additional revenues may well be utilized for developing roads further; but as roads are not a profit-yielding concern, the extent of initial expenditure by borrowed capital will ultimately depend upon the amount the State is willing to spend on road maintenance and to meet interest and sinking fund charges, which cannot be very large so long as the whole financial and consequently the administrative machinery of the Government is not thoroughly overhauled.

But as other nation-building activities will have equally strong claims upon the revenues of the State, it may very seriously be doubted if even the suggested changes in the administrative system of the country would solve the problem of roads within a measurable length of time. But as the improvement of the economic condition of the country in general and of the rural population in particular hinges largely on the development of communications, something which is likely to yield results more quickly and surely will have to be done. To our mind the suggestion of the Agricultural Commission, that the ancient system of mobilizing the corporate labour of the village community should be revived, is full of possibilities, and should have immediately received the attention it really deserved from the Government. According to this system each village would provide labour for the construction of roads which connect that village with a main road, while the materials and skilled labour (such as road engineers) would be provided by the State; and each village would be responsible for the maintenance of its own part of the road. As the agricultural population is idle for more than six months in a year, the offer of labour for road construction would not entail any serious hardships. Besides, there is no reason why the country as a whole or a province should be entirely responsible for financing the construction of roads which are to be used only by the people living in a particular area. However, if this scheme is adopted, nearly three-quarters of the roads needed in India could be constructed at a cost well within the financial means of the Provincial and Central Governments. Under this system the provincial Governments could concentrate their attention upon main arterial roads (with which the country is already well provided), while local boards

could develop and maintain roads of local importance with their own resources supplemented, if need be, by provincial subsidies. But even this quasi-voluntary system would show tangible results if larger amounts are allocated by the Governments concerned for maintenance charges on interest and sinking fund accounts, which can be done only by drastic retrenchment of unproductive expenditure both by the Central and Provincial Governments.

in the means of road transport. Improvements In spite of its enormous importance, nothing has so far been done by the Government or any other agency to introduce improvements in the means of road transport. As we have seen, the bulk of road transport in India is effected by means of bullock carts, and it is only in the larger centres of industry and commerce that the motor lorry has displaced to a certain extent the bullock cart. But the damage done to roads by this primitive form of cart is enormous. The narrow rim of these carts pulverizes a macamadized road, and thus the cost of road maintenance is increased enormously which is beyond the means of a poor country like India. But on the other hand for a very long time to come the bullock cart will remain the principal means of transport in India; in fact the Agricultural Commission expressed doubt whether mechanical transport will ever completely displace the bullock cart for short distance traffic in rural areas. In this connection we must take into account the fact that the bullock is not only useful for transport, but also pulls the plough and draws water from the well. For these among other reasons the bullock cart is bound to survive for a long time yet. In these circumstances there is no other alternative but to devise means of improving the inevitable country cart in the interests of the roads of the country.

A most satisfactory solution of this difficult problem was offered recently by the fitting of pneumatic rubber tyres to ordinary bullock carts, and for this device some claims of far-reaching character have been made. Tests carried out in various parts of the country have proved the large loading capacity

of the new types of carts as compared with the old, which means that apart from the preservation of road surface, the adoption of pneumatic tyres would be a boon to the degenerated draught animals of the country. As far as the effects of this innovation on the roads of the country are concerned, we may relate the results of experiments on two identical roads in the North-West Frontier Province which are typical of those conducted in other parts of the country. On one track two country carts were placed with loads of 4,727 lbs. and 4,851 lbs; on the other two rubber tyred carts with 6,258 lbs. and 6.763 lbs. loads were placed. (These figures also indicate the relative load drawing capacity of the animals in the two varieties of bullock carts). The track on which the country carts plied was worn into pot-holes in four days while the other road showed no signs of wear. Again the average pace of pneumatic tyred carts was 3.12 miles per hour in spite of their heavier loads, while that of the iron tyred carts was only 2.6 miles per hour. Thus it will be seen that not only the interests of economy in road maintenance costs demand the adoption of improved types of cart wheels, but this change is also necessary in the interests of the cart-owner himself on account of increased pay load, easier draught and increased speed which the mere adoption of the new type of wheel is calculated to bring about.

But the owners of bullock carts are generally so poor that the initial cost of fitting pneumatic wheels is likely to be a stumbling block in the way of the desired change. This difficulty, however, can be easily overcome by the introduction of the hire-purchase system of which the bullock-cart owners would be induced to avail themselves by the substantial advantages of the improved fittings—provided, of course, that the terms of the hire-purchase are not too rigid and exorbitant. During the initial stages a small subsidy from the Government may be necessary which may be given from the general revenues or by means of borrowed money by the provincial Governments. Anyhow, if direct and indirect encouragement is given by the State, it would not be difficult for the Government to make the fitting of rubber tyred wheels obligatory in course of time.

This, to our mind, is the only practicable way of preserving the roads of the country and bringing down the maintenance costs to reasonable proportions.

III. Railway

development in India. By the beginning of the forties of the last century the principles of industrial technique had undergone a complete change in England: railways in Britain had proved to be a success and their value as an agency for the economic development of the country had been clearly demonstrated; moreover Britain had consolidated her political power in India. Thus the political interest of the East India Company and the economic interests of England (by way of finding new sources of raw products as well as new markets for her industrial products) demanded the opening up of the interior of India and the linking up of the various parts of the country by the development of communications. And this could obviously be done most efficaciously by the construction of railways whose technical and commercial success had already been demonstrated in England.

But the new rulers of India were by no means certain that conditions in India were suitable to render railway construction a financially profitable proposition. Therefore as a purely experimental measure, the construction of three lines (Calcutta to Raniganj, Bombay to Kalyan and Madras to Arkonam) was sanctioned in 1845. There being scarcity of capital in India and British capital being unwilling to embark upon enterprises whose potentialities had yet to be proved, the East India Company had to accomplish these early constructions by guaranteeing a fixed rate of interest on the capital invested by British companies on these railway lines. It was in 1853, when Lord Dalhousie sent his minute recommending on social, political and economic grounds the construction of trunk lines, that a more definite policy in regard to railway development was adopted by the Government. Lord Dalhousie

discouraged State enterprise, and recommended that railway construction should be entrusted to companies which, as had been the case heretofore, should be offered by the Government a guarantee of interest on the capital invested. These proposals were accepted by the Secretary of State, and railway construction was started from different points by various guaranteed companies. The contracts with these companies laid down the following conditions: (1) a free grant of land was to be made by the Government to the companies for purposes of railway construction; (2) interest between 4½ and 5 per cent. was guaranteed by the Government on the capital invested by the companies; (3) the companies were to share half the surplus profits with the Government in order to repay the amounts which had been previously paid to them in lieu of the guaranteed interest; (4) the Government was empowered to exercise control over the railways in the matter of finance and general working; and (5) the railways could be acquired by the Government after twenty-five or fifty years on certain terms.

It will be seen that the Government had no means of controlling expenditure by railway companies. Naturally the result was that the companies had no incentive to economize especially when five per cent. interest on the capital invested had been guaranteed to them. For these very reasons the companies were not very anxious to economize in the actual working of railways. The result was that the railways failed to earn the stipulated five per cent on the invested capital and the deficit had to be made good from the general revenues.

Being convinced of the wastefulness of the guarantee system, the Covernment decided during the sixties to use its own credit for the construction of railways. From 1869 onwards railway construction was undertaken directly by the Government, who decided to borrow up to £2 millions annually for the purpose in London. But soon afterwards the difficulties consequent upon the depreciation of the rupee, the famine (during 1874-79) and the Afghan war intervened and rendered progress extremely difficult. On top of all this the Famine

Commission of 1880 recommended that at least 5,000 miles of railway lines should be immediately added and that in order to safeguard the country against famines the aggregate of railway mileage should be pushed up to 20,000. Being unduly cautious and pessimistic about their borrowing power to undertake a programme of railway construction on an extensive scale, the Government once again resorted to the guarantee system in the early eighties. But the terms of agreement were now altered in favour of Government, the most important changes being that interest was guaranteed on an average at about 3½ per cent., and the Government was now entitled to obtain to per cent. of the profits of the railways. However, great progress was made in railway construction after the introduction of the new guarantee system. Indian States were at this stage encouraged by the Government of India to construct railways in their territories. Again, the construction of branch lines was encouraged by offering rebates on the earning of through traffic with main lines. This system of branch line construction was not abandoned till 1925, when, following the recommendations of the Acworth Committee, the Covernment itself undertook the financing of branch lines. From the early years of the present century the Government embarked upon a programme of more intensive railway development, with the result that between 1900 and 1914 nearly 10,000 miles of new lines were opened up.

Some idea of the progress of railway construction in India may be had from the following figures. Between 1844 and 1870, only 4,255 miles of railway line were opened to traffic; during the next ten years another 4,239 miles were added, thus bringing the total to 8,494 miles in 1880. Between 1880 and 1900, which was the period of the new guarantee system, 16,258 miles of railway line were opened up, while during the next fourteen years 9,904 miles were added, thus bringing the total to 34,656 miles in 1914.

Railways during and after the war. Between 1934 and 1918 not only capital expenditure on railways

ceased almost completely on account of the financial exigencies of war, but it also became impossible to effect the necessary renewals, and therefore to maintain the railways in a state of efficiency, on account of the cessation of the supplies of railway materials from abroad. The result was that the entire railway system broke down completely; and the resulting chaos gave rise to the demand that the State itself should assume the management of railways. However, the Government sought a solution of its difficulties by appointing in 1920 a Committee under the Chairmanship of Sir William Acworth, which was entrusted, among other things, with the task of advising the Government on its railway construction and maintenance policy. As a result of the deliberations of this Committee, the Government embarked upon a programme of rehabilitation and improvement involving an expenditure of 150 crores during the years 1921-26. At the end of this period the railways of India became even more efficient than they had been before the war; but as far as the construction of new lines was concerned, the Government did not show the same amount of enthusiasm. In 1932-33 there were 42,950 miles of railway line open to traffic; which shows that only 8,294 miles of new lines have been added since the war. The most important feature of post-war railway development has been that, the construction of trunk lines having been nearly completed, attention has been concentrated mainly upon the construction of branch or feeder lines with the double object of opening up new territories and developing the traffic on main lines. As, however, owing to trade depression the railways in India have been run at a loss since 1930-31, schemes of expansion involving new capital expenditure have been abandoned, and railway authorities have confined their attention to completing the schemes on which work had already been started before the beginning of the present period of heavy losses.

Investments and returns on capital. By the year 1900 the capital investment on railways in India had

touched the Rs. 329.53 crores level; in 1913-14 it amounted to Rs. 495.09 crores; and in 1931-32 it stood at Rs. 876.34 crores. But it must not be supposed that railways in India have been a profit earning proposition all through their career. Up to the year 1898 they were a charge upon the Indian exchequer, and the deficits which the Government had to meet from its ordinary revenues amounted to over 51.5 million sterling. These early losses were mainly due to the fact that a fairly high rate of interest on their capital had been guaranteed to the companies by the Government, which encouraged them to adopt highly wasteful methods of construction and management without fear of consequences. Further, the construction of highly expensive strategic lines was undertaken which had to be run at heavy losses. And lastly, there was inadequacy of traffic in goods and passengers owing to the undeveloped state of the country as a whole. The construction of canals in the Punjab and Sind turned the purely strategic lines of the north-west into profit-carning concerns, and the gradual development of other parts of the country tended to bring about the same result. Moreover the renewal of original contracts with the guaranteed companies on terms less favourable to them in the matter of returns on capital and the division of surpluses was to no mean extent responsible for turning losses into profits. These profits, while showing wide variation from year to year according to changes in the fortunes of agriculture, continued up till 1930-31 when, owing to trade depression, heavy deficits appeared in the railway budget-deficits which have continued upto the present day and which have been temporarily made up by raiding the reserve and depreciation funds.

The consequences of railway development. But although the railways were run at a loss for nearly half a century, and the tax-payer had to make good all those losses, the country from even a purely economic point of view gained considerably on the balance. We might first study the consequences of railway development from the point of view of agriculture, industry and commerce. As far as the

agriculturist is concerned there is no doubt that the development of railways has benefited him by bringing about regional specialization and extending the market for his products. Again, improvements in agricultural technique have been effected to a certain extent which have tended to improve the economic condition of the agriculturist. The establishment of various manufacturing industries in India has been rendered possible by the opening up of internal markets and the provision of facilities for the collection and transportation of raw materials by railways. Again, the development and exploitation of the forest and mineral resources of the country is the direct consequence of the development of railways. But these advantages in the field of production have been offset to a certain extent by the decline of our handicrafts as a result of railway development. As regards commerce, we have to note the fact that both the internal and external trade of the country has expanded enormously as a result of railway construction. Among the socio-economic advantages the ability to render relief to faminestricken areas by railways and the saving of men and cattle from starvation and death deserves special attention. Indeed, we may say that even from a purely economic point of view the gains to the community as a whole from famine relief measures have more than covered the losses suffered by the country in consequence of railway development during the early stages.

But in order to form an idea of the value of railways we must also take into account their various purely social and political advantages. The various social changes which we have already noted in an earlier chapter are as much the result of the spread of education as of the development of communications, particularly railways. Again, if in spite of the barriers of language the people of India have come to have consciousness of political unity, this miracle has been wrought by the linking up of various parts of the country by means of railways. And lastly, the efficiency of administration, both civil and military, has vastly increased as a result of railway development.

Scope for further development. The question this stage naturally arises: Is the country adequately supplied with railways, or is there any scope for further development? In order to be able to answer this question we must be clear on three points (a) whether facilities for lone and medium distance transport are still lacking in certain parts of the country, (b) whether new lines will become self-supporting after some time or alternatively the losses consequent upon the extension of railways will be counterbalanced by the development of the areas hitherto not served by railways, and (c) whether any other means of transport can be utilized to meet the requirements of those areas. A glance at the railway map of India would show that extensive areas still remain untouched by railways. The comparative inferiority of India in the matter of railway mileage may be illustrated by pointing out that as against India's 2.2 miles of railway line per 100 square miles and 7,894 inhabitants per mile of railway line, the United States, which is a vast agricultural country like India, has 8.42 miles of line per 100 square miles and 469 inhabitants per mile of railway line. Again, Canada, Argentine, the Union of South Africa, Australia and New Zealand have an average of only about 300 inhabitants per mile of railway line. But the shortage of route mileage per unit of area or number of inhabitants does not indicate the extent of the requirements of the country. Railways live on traffic in goods and passengers; in other words, the extent of railway development depends upon the general economic condition of the people. The people in India are so poor that they cannot afford to travel, and their requirements are so few that the movement of goods on a large scale cannot be expected. In these circumstances comparison with other countries cannot lead us definitely to the conclusion that India is as much undersupplied with railways as is indicated by the above figures. On the other hand, if production could some how be increased without bringing about a corresponding increase in population, the volume of traffic in goods and passengers would automatically increase, and the case for further development of railways would be established. There cannot, however, be any doubt that the extension of railways would lead to the development of certain areas, but the needs of the country as a whole under the prevailing conditions can never be so great as to warrrant the development of railways on a scale anywhere approaching the standard of other countries.

The developments in the realm of transport must obviously aim at cutting down the distance between the various undeveloped parts of the country and the existing railway lines to more reasonable proportions. The ideal before the State should be to develop railways in such a manner as to bring every habitable part of the country within "motorable distance" from the railway lines. In other words, the roads should serve as the feeders, and not the branch lines when the construction of these lines is likely to involve the Government in losses for a long time. The choice between railways and roads, however, will depend upon a number of factors, the examination of which we propose to take up in a later section.

Railway management and control. The question of railway management and control is directly connected with the questions of contract and ownership. We have seen that under the old guarantee system the Government exercised little control over the construction and management of railways, with the result that the railways constructed under this system were hopeless financial failures. But when the Government was compelled to resort to an improved form of guarantee system during the nineties, it exercised to the fullest extent its right to supervise and control capital expenditure and general management. This was done through the Railway Branch of the Public Works Department. In 1905 these functions were entrusted to the newly constituted Railway Board which was put directly under the Government of India. and which moreover was entrusted with the task of exercising control over general railway policy. Subject to these disabilities and control, the various companies enjoyed a sort of

autonomy in matters relating to management, while on the other hand the State-owned and managed railways had their separate managing organization, though their ultimate control rested in the hands of the Government of India and was exercised via the Department of Industry and Commerce. Immediately after the war, when the contracts with some of the companies were due to expire, the question arose as to whether the Government should exercise its right of acquiring those railways and managing them. This question was referred to the Acworth Committee in 1920, the majority of which reported in favour of State management. Accordingly the Government purchased certain lines and put them under State management, while in other cases after acquiring certain lines it entered into new contracts with old companies in regard to their management. Thus most of the trunk lines have been acquired by the State. At the present time, the Fast Indian, Eastern Bengal, North Western and Great Indian Peninsular systems are managed by the State, while the Assam-Bengal, Bombay-Baroda and Central India. Madras and Southern Mahratta and South Indian railway systems are Covernmentowned but managed by companies which have their Boards of Directors in London and are represented in India by an Agent. But the policy of acquiring control over railways has received a setback during recent years, as we find that contracts with the companies controlling the Bengal and North-Western and the Rohilkhand and Kumaon Railways have been renewed for different periods.

But it must not be supposed that the companies managing various State-owned railways are independent in all matters concerning those railways. These managing companies are a sort of managing agency firms from whom all control and initiative in matters relating to general policy and economy have been taken away by the Government. The real control is in the hands of the Governor-General-in-Council and is exercised through the Railway Board. This Board as we have seen, was originally constituted in 1905; but between that year

and 1920 its functions were slightly enlarged. The Acworth Committee, in view of its recommendations regarding management and policy in general, suggested that the Board should be reorganised so as to enable it to supervise the railway system of the country in a more efficient manner. This re-organisation took place in 1924, and the Board now consists of a Chief Commissioner, a financial commissioner and three members. These five look after railway policy relating to different subjects. The Board as a whole is assisted by five Directors who are experts in different branches of railway management and organisation. It is worth noting that the Board itself as well as its directors are appointed by the Central Executive. The Board as constituted at present is the statutory authority over all railways in India in matters relating to actual administration and policy. It is, like other departments of the Central Government, immune from interference by the legislature, so that the country at large does not even indirectly exercise the slightest control over railway management and policy. But as the control of railways lies in the hands of the Central Executive, which is also responsible for controlling the agricultural, industrial, and commercial policy of the country, it is possible, at least in theory, for the Central Government to shape its railway policy in the interests of agriculture, industry and commerce of the country.

Administration of railway finance. Up to 1924-25 the finances of Indian railways were blended with the general finances of the country. According to this arrangement the railways were treated as a sort of department of the Central Government much in the same manner as Irrigation Departments are treated by the several Provincial Governments. Consequently the railway surplus was utilized as ordinary revenue, while the deficits were treated as an ordinary part of governmental expenditure. As the carnings of railways in any year would depend upon the amount of goods and the number of passengers carried, which would vary according to rainfall and the condition of crops, this arrangement gave

rise to uncertainties in regard to the Central Government's budgetary position. Another result of this blending of finances was that the railways were never conducted on strictly commercial lines. The Acworth Committee after examining the problem recommended the immediate separation of the finances. Accordingly, the Railway budget was separated from the general budget in 1024-25. As a result of this settlement the railways were to contribute annually to the general revenues 1 per cent. on the capital at charge plus one-fifth of surplus profits, and if after the payment of this contribution the amount available for transfer to Railway Reserves exceeded Rs. 3 crores, one-third of the excess was to be appropriated to the general revenues. These contributions to the general revenues were based on the idea that just as losses during the nineteenth cenutry were paid by the tax-payer, so the gains of prosperous times should be used in lightening his burden. Apart from these contributions, which are more or less in the nature of fixed charges, the railways have to find, from their gross profits, interest charges on capital cost account (which is another fixed item) as well as to make contributions to the Depreciation Fund (yet another fixed charge) and, if a surplus is available after meeting all these fixed charges, to the reserve fund. The main object of the reserve fund appears to be to provide for the fluctuations in the normal contributions by the railways to various fixed charges during lean years, as well as to write down captialfunctions which it could hardly be expected to perform in view of the appropriation of large surpluses by the Government on various accounts.

Recent Tendencies in railway finance. We have seen that up to the year 1898 the railways in India were run at a loss, and that the total losses aggregated to Rs. 57.80 crores up to that year. The railways, however, experienced a change in their fortune in 1899, and from that year up to 1929-30 (except in 1918 and 1921) they were able to show substantial profits. From 1930-31 onwards, however,

the railways have been running at a loss. During the seven years 1924-31, the railways contributed to general revenues the sum of Rs. 41.65 crores or on an average nearly Rs. 6 crores per annum. Further, they had accumulated between 1924-25 and 1928-29 Rs. 18.71 crores in the Reserve Fund, and had contributed on an average nearly Rs. 12.5 crores a year to the Depreciation Fund between 1924-25 and 1934-35.

As a result of trade depression the tide once again turned against the railways in 1930-31 when, after making contributions to the general revenues, depreciation fund and interest charges on capital cost account there was a deficit of Rs. 6.24 crores. In 1931-32 the contributions to the general revenues were held in abeyance, and the deficit amounted to Rs. 9.86 crores. In 1932-33 the losses amounted to Rs. 10.80 crores, in 1933-34 they stood at Rs. 7.96 crores and the revised estimates for 1934-35 have put the losses at Rs 4.24 crores.

The question arises: how have these enormous losses been made up? In the first place practically the whole of the Reserve Fund has been eaten up by these deficits. Again, nearly Rs. 20 crores have been borrowed from the depreciation fund. Have the railways done anything to reduce their losses? It may be pointed out in this connection that there are five main items of expenditure in the railways budget: (a) interest charges, (b) depreciation charges (c) contributions to general revenues, (d) contributions to Reserve Fund, and (e) operating charges. The first two items are more or less fixed, so that there is no room for economy there; contributions to general revenues have been suspended since 1931-32; the Reserve Fund has ceased to exist since 1931-32. In these circumstances the railways could cut down their losses only by reducing their opreating charges, and in this direction they have not been very successful. Salaries and wages account for the bulk of the expendiutre under this head; but while the loss of traffic has necessitated the reduction of the staff, practically nothing has been done to reduce expenditure under this head to more reasonable dimensious. Notwithstanding the heavy losses of the past six years even the salary cuts, which were imposed in 1932, have been restored, which means that contrary to the claims of our rulers the railways of India are not being run on business lines. No business concern in the world has left the wages of its employees intact since the depression started in 1929; and Indian railways by being an exception only prove the accuracy of the above contention. However, as the Depreciation Fund cannot go on lending money for ever, the railways will have to cut down their over-head expenditure drastically in order to avoid becoming a charge upon general revenues, which they can do only by reducing the salary bill so as to bring it in conformity with their means and resources.

The rates policy. As railway rates in India have always been fixed according to "what the traffic will hear" principle, regardless of the interests of Indian industries, agriculture and commerce, and therefore to the detriment of their own ultimate interests, it is highly problematical if a change of rate policy would immediately alter the budgetary position of the railways. The peculiarities of the present rate policy of Indian railways may be summed up by saying that rates between ports and inland centres are much lower than inland rates, that the maximum and minimum of the rates for various classifications of goods are fixed by the Government. and that the present rate policy is not in the ultimate interests of Indian agriculture and industry and therefore of the railways themselves. Until recently the evils associated with the rate policy appeared in a more glaring form; they have been remedied to a certain extent during recent years as a result of the recommendations of the Industrial, Fiscal and Agricultural Commissions: nevertheless they are still there and are hampering the economic progress of the country and consequently of railways themselves. When the movement of goods to and from the ports is subject to reduced rates, this concession reacts upon industrics in inland centres by reducing their ability to compete with foreign countries owing to higher transportation charges on raw material and finished goods. Again, when the transportation of productive materials is subject to heavy charges, agricultural improvements are retarded. Both these adversely affect production and therefore the purchasing power of the people at large; and thus the railways themselves are adversely affected in the long run. It would thus appear that the present rate policy is devoid of all foresight in regard to the interests of railways themselves, and is certainly against the economic interests of the country as a whole. In revising the rates schedule the railways will have to take into account the fact that their own prosperity is linked up with the prosperity of producers and consumers in the country, and that the reduction of rates will hurt the railways but temporarily. At any rate the present tendency of manipulating the rates with a view to meeting heavy deficits will in the long run prove to be suicidal

State versus company management. In the circumrailways have certain fixed stances that the charges and that their income cannot be increased immediately, the only alternative to juin and bankruptcy appears to be the reorganization of railways, the first step towards which would be the improvement of general management and the reduction of working expenses. In this connection the question arises: Are the State-managed or the Companymanaged railways more likely to introduce these improvements, and which form of management would ultimately be in the best interests of the country? In order to arrive at a conclusion we might study the results of the working of State railways under the two systems during recent years. The capital at charge on March 31, 1931 of State-owned railways was 783.32 crores, of which 497.91 crores was accounted for by the State-managed lines and 281.97 crores by the lines worked by companies, the balance being made up by miscellaneous items. This distribution has been in operation roughly since 1925. But in spite of the fact that the capital at charge of company-managed State railways has been only about three-fifths of the capital of Statemanaged railways, the former have consistently shown higher

net returns than the latter. The following table explains the position clearly.*

Net gain or loss to Government: 1928-29 1929-30 1930-31 1931-32 1932-33. State Railways (lakhs of Rs.) 260 -80 -653 -765 -776 Net gain or loss to Government:

Company Railways (lakhs of Rs.) 383 325 32 -215 -287

"These figures are somewhat remarkable considering that, while the State-managed railways meet from capital all the extra cost of replacing an asset, the company railways meet such expenditure from revenue. The State-worked lines include the strategic lines of the Frontier, but even after making an allowance for the loss on these lines, the Company lines show better results."† It is also evident that had it not been for the better financial results shown by Company lines, the losses would have enormously increased render SO 28 heavy contributions from general revenues necessary. Since the maxima and minima of rates are fixed by the Government itself and are common to all State-owned railways, it would be wrong to suggest that in showing better financial results the Companies have fleeced the consumer. On the contrary the dice are loaded definitely in favour of State-managed lines, seeing that they all serve the most densely populated and prosperous areas in the country. The conclusion in these circumstances is obvious: the Company-managed railways have been able to show better financial results merely on account of their more efficient and elastic organisation, so that from the point of view of efficiency of organisation there is nothing to recommend the management of State-owned railways by the State itself.

It is certainly true that the Government is responsible for controlling the policy of Company-managed railways: it controls appointments, rates, extensions and the general conduct of railways; but the fact that the companies can show better financial results in spite of these restrictions goes vastly in their favour. Of course there is nothing inherently wrong in Government

^{*} See Indian Finance Year Book, 1935, p. 278.

[†] Ibid. p. 279.

enterprise, especially in the field of public utility undertakings: and if company-management has shown better results it is probably due to the fact that the administrative machinery of Government-managed railways in India is too inelastic to show the same degree of efficiency as we have come to associate with company management. Red-tapeism in purely commercial matters has always a baneful influence upon the efficiency of management, and so long as the Government regards State enterprise in general with suspicion and distrust, the conduct of a solitary commercial enterprise which does not work under conditions of complete monopoly can never be satisfactory. Until therefore the socialization of primary economic services becomes an accomplished fact (which can be done only if the general economic policy of the Government undergoes a complete somersault), it would be better if the Government acts upon the recommendations of the Minority of the Acworth Committee, and entrusts the management of railways to Indian domiciled companies. This arrangement would not deprive the country of the various advantages associated with State enterprise: for the Government as the owner of railways would, as at present. be in a position to guide the working of railways according to its own policy-a policy which may be shaped not according to the momentary interests of the Government and the taxpayer but according to the ultimate economic interests of the country as a whole.

Railways under the new Constitution. But the Government of India Act, 1935, provides that "the executive authority of the Federation in respect of the regulation and the construction, maintenance and operation of railways shall be exercised by a Federal Railway Authority," and that this Authority shall be free from all interference by the Legislature. As the Legislature will have no control over the members of the Authority, and as this Authority will be directly under the Governor-General, it is obvious that the railways of the country will not, under the new constitution, be even indirectly controlled by the people in the interest of the country at large, and that as agriculture, industry, forests and commerce are supposed to

come under popular control (subject of course to a number of restrictions and reservations), it would not be possible for the reformed executive to co-ordinate its policy relating to general economic development with railway policy; in fact, it may be taken as certain that the railways will never be allowed to play a part in the general economic development of the country. And we are told by the authors of the new Government of India Act that this fundamental maladjustment' would ensure the working of railways on sound commercial lines!

Rail-road Co-ordination. Since the war the introduction of motor transport has created new problems for Indian railways: it has fed the railways with traffic in goods and passengers when it has been operating on roads converging on railway lines, and it has deprived them of traffic when it has been operating on roads that run parallel to the railway lines. The problem is: how to coordinate the activities of the two in such a manner as to avoid the wastes of competition and to yield results beneficial to the country at large?

As far as the feeding of railways by roads is concerned, the problem does not present many difficulties. It may be taken as an established fact that road transport is cheaper than rail transport over short and medium distances, and that the intervention of diesel motor is lengthening the distance over which the railways would never be able to compete with road transport. In view of these technical improvements it seems highly problematical if there is now much room for further railway development in India; at any rate before it is decided to construct a new railway line, it would be necessary to enquire if it would not be more economical as well as beneficial to the areas concerned and the existing railways themselves if a road is constructed instead and more modern means of transport are introduced thereon. Who should undertake this task? Of course roads will have to be constructed by local or provincial Governments; but as far as the actual provision of the means of transport is concerned, it may be done either by local or provincial Governments, or by private individuals, or by railways themselves. The handing over of transport monopoly to a system of railways whose conduct is in no way allowed to be influenced by the will of the nation cannot be countenanced. Private enterprise, as has been shown during recent years all over India, often degenerates into uneconomic competition, and besides the service it provides is not always very efficient. On the other hand all these defects are absent in the case of enterprise conducted by local or provincial Governments. In any case, road-rail co-ordination in this particular sphere will be confined to the definition of the scope of the two in various undeveloped localities.

But co-ordination would assume a somewhat different aspect when the case of roads running parallel to the existing railway lines is taken into account. In this case the two systems compete, and as road transport is cheaper, railways lose in consequence; and this competition is likely to become the keener with further technical developments in the construction of motor vehicles. Should this competition be encouraged or should it be suppressed by regulating road traffic and by allowing railways to put their vehicles on roads and to capture the traffic? The aim of road-rail co-ordination in this case appears to be to make things easy and comfortable for the railways, which can be done either by allowing the competing roads to be destroyed for want of repairs or by allowing railways to appear with all their unlimited resources on the roads for traffic; and it means the establishment of monopoly in both cases. There would be no objection against such a monopoly only if railways were controlled and run by Indians themselves in the interests of the country. In the absence of such control, roads offer the only means of escape from the selfish policy of the railways which they are likely to adopt under a system of foreign control. So long, therefore, as India's railways remain under the control of foreigners (whose economic interests will always clash with our own) coordination by eliminating competition would not be in the best interests of the country.

Inland Waterways

Varieties and advantages of inland waterway transport. As compared with railway and road transport, water transport is much cheaper owing chiefly to the fact that the actual cost of labour and power per unit of article carried is much smaller, and because (except in the case of artificial waterways) the initial and maintenance costs are comparatively negligible. There are three possible varieties of inland waterways; (a)-navigable rivers, (b) purely navigation canals, and (c) irrigation cum navigation canals. The possibilities of inland waterway transport as a whole as well as of each of these three main varieties would obviously differ from country to country according to the physical characteristics of the country and the presence of navigable rivers. We shall examine the possibilities of all these three varieties in various parts of India.

Possibilities of inland waterways. As far the problem of using ordinary irrigation and specially structed navigation canals in India is concerned, may dismiss the whole subject with the remark that while the use of the former is impracticable owing to the unevenness of water flow in irrigation canals and the fragility of their embankments, the construction of navigation canals can never be a financially sound proposition in a country where densely populated centres of commerce and industry are few and far River navigation has distinctly better prospects but even in this field we must not expect spectacular developments. The country south of the Vindhyas is completely devoid of possibilities, except in the lower deltic regions, owing to the ruggedness of its surface and the seasonal character of its rivers. In the north, on the other hand, the prospects are more encouraging. The Indus, the Ganges and the Brahamputra are all navigable over considerable distance and are already being used by small crafts to a certain extent. But the competition of railways, lack of organisation and the absence of interest on the part of the State have prevented the inland waterways in the north from being used

transport purposes to the same extent as they might have been used by more enterprising people ruled by a more sympathetic government. The Industrial Commission and even the Acworth (Railway) Committee deplored the existing state of affairs, and recommended the adoption of a policy designed to encourage the use of inland waterways for transport purposes and to keep the annihilating competition of railways within reasonable limits. But nothing has so far been done, and is not likely to be done so long as the Government regards the prosperity of railways, and not the prosperity of the country as a whole, as an end in itself. Cheap transport is a necessary condition for the prosperity of agriculture and industry, and, as has been pointed out above, water transport is always cheaper than both railway and road transport.

Irrigation Versus Navigation. But the navigability of the rivers of upper India, especially of the Indus and the Gauges, may suffer to a certain extent as a result of the diversion of their waters into new canals. As irrigation is more important than cheaper transport, no consideration should stand in the way of the utilization of the water of various rivers for purely agricultural purposes. But as the flow of water in the rivers and their tributaries cannot, for various technical reasons, be reduced below a certain fixed minimum. it follows that even if the irrigation system is developed to the highest pitch, the navigability of the main streams would be only reduced, but never completely destroyed. The ideal, in these circumstances, before the nation should be first to use the waters of the rivers for irrigation purposes to the greatest possible extent and to develop inland water transport facilities as then available, but not at the expense of irrigation.

Coastal and Oceanic Shipping

The Present position of inland shipping and its Possibilities. In the absence of reliable data it is extremely difficult to form an idea of the present position of Indian coastal and oceanic shipping. Various estimates have been offered with regard to coastal trade, but taking all the various relevant

factors into consideration it seems that in normal times at least 4 million tons of merchandise is annually carried from one part of the country to another by the sea route. Of this, according to the estimates offered by Indian shipping interests, only about 15 per cent is carried by Indian-owned vessels at the present time. As regards the share of Indian shipping in India's sea borne trade, the inferiority is even more pronounced than in the case of coastal shipping. In 1928-29, which was the last pre-depression year, nearly 15 million tons of merchandise valued at nearly Rs. 600 crores was carried to and from Indian ports. Of this only about 1.5 per cent. of goods by weight were carried by Indian vessels. Of even this small, almost negligible, share more than one-third was carried by small sailing vessels. These figures show that Indian shipping enterprise is practically non-existent, and that almost all the profits of the carrying trade, which according to Mr. S. N. Haji average nearly Rs. 57 crores a year in normal times, are taken away by foreign shipping concerns.*

Causes of backwardness. But this backwardness of Indian coastal and oceanic shipping must not be attributed to lack of enterprise on the part of Indians themselves, know that during the past forty years We number of shipping companies have been formed, and all of them, with one or two exceptions, have gone into liquidation after suffering heavy losses. The causes of these failures are also the causes of the backwardness of Indian shipping; and these failures may be attributed directly to the relentless and unfair competition of strongly entrenched foreign concerns and the apathy of our rulers. Let us take coastal shipping first. The ships operating in Indian water belong to a few British Companies which have formed themselves into a "Conference", and which by virtue of their dominating position can charge monopoly prices for the services they render much against the interests of the Indian consumer. High profits under monopolistic conditions have enabled them to launch

^{&#}x27;See Economics of Shipping, p. 375.

annihilating rate wars against infant Indian shipping concerns, while their age-long connection with Indian merchants has enabled them to introduce the deferred rebate system to the detriment of Indian shipping interests. The object of the deferred rate system is to prevent the traffic in goods from passing into the hands of the shipping concerns not belonging to the Conference, and this the Conference companies do by means of granting a rebate of about 10 per cent. on the freight provided a shipper has not sent his goods by any other but a Conference ship during a certain period in the past, and provided he continues to use the Conference ships for the despatch of goods for a specified period in the future. arrangement naturally prevents the shippers from transferring their custom to other concerns which they can do only by forfeiting valuable concessions in the shape of rebates. By these means new Indian shipping concerns have been starved of custom and forced to go out of business. In addition to this powerful weapon, these Conference Companies have launched rate wars which they were in a position to finance out of their enormous reserves without seriously affecting their dividends, and which infant Indian concerns were not in a position to face. The position of British shipping companies is further strengthened by the grant of contracts for the carriage of mails and Government stores which are denied to Indian shipping concerns on various pretexts by the Government.

The Appointment of the Mercantile Marine Committee. The hostility of British shipping concerns towards Indian enterprise naturally gave rise to demand for governmental intervention. As a result the Indian Mercantile Marine Committee was appointed in February, 1023, to examine the possibility and methods of developing the shipping and ship-building industries in India. The Committee found that India possessed all basic facilities for the development of these industries, and made some very sound and practicable recommendations with that end in view. To begin with, finding the country handicapped in the matter of trained navigation officers and marine engineers they recommended that the Government should

provide facilities for training. They further recommended that, as an initial measure, encouragement should be given to the shipping industry by reserving the coastal trade for ships which were eventually to come directly under the ownership and control of the nationals of India if they did not already satisfy this condition. These ships were ultimately to be required to employ only Indian officers and engineers. In order to expedite the projected transformation, the committee recommended that the Government of India should acquire a British line operating on the Indian coast and gradually transfer its control to an Indian concern. Further, rate-wars, deferred rebates and other practices in restraint of trade were to be declared unlawful, while oceanic shipping was to be encouraged by the grant of bounties to Indian-owned vessels and shipping companies. And, finally, the Committee made some useful suggestions for the establishment of the ship-building industry, such as the grant of bounties on ship construction, the offer of loans on cheap terms for the construction of ship-building yards, the engagement of foreign technical experts, and the provision of facilities for instruction in naval architecture both in India and abroad.

Attitude of the Government. It is obvious that these recommendations implied the gradual elimination of British enterprise in the field of India's coastal and oceanic shipping trade which, apart from the employment of a large number of highly paid men, involved an annual loss of more than £50 million. This kind of arrangement could not be countenanced by the Government of India constituted as it is at the present time. Naturally the whole scheme was thrown overboard, and nothing was done to develop the shipping and ship-building industries except in the matter of the provision of facilities for the training of marine officers and engineers, which was done by providing a small vessel for the purpose.

Bills for the reservation of coastal traffic and the abolition of deferred rebates. It was in the above circumstances that having despaired of Government's

attitude, Mr. S. N. Haji introduced his Bill in the Assembly in September, 1928, for the reservation of coastal shipping for Indian-owned vessels. The object of this Bill was to transfer the ownership of the vessels and lines operating in Indian waters to British Indian national by providing that 75 per cent. of the stock should belong to the latter. and that representation on the directorate as well as voting power should be in proportion to the percentage of stock held by Indians. The principles underlying this bill were by no means new and untried. They had already been successfully applied by various foreign countries including some member States of the British Empire and England itself. But in spite of this fact the Government and the European community opposed the measure on grounds of racial discrimination and impracticability. In l'ebruary, 1929, Mr. Haji introduced another Bill for the abolition of the deferred rebate system with a view to breaking the monopoly of the existing shipping combines and enabling new concerns to enter the fold as well as preventing the establishment of a monopoly in the future.

It is obvious that without such extraordinary measures as suggested by the Mercantile Marine Committee or provided for in Mr. Haji's two Bills it would never be possible to develop the shipping industry in India in the face of the planned hostility of foreign vested interests. However, these Bills never became Law, with the result that the shipping trade of India is still controlled by foreigners, and what is worse, there is now no prospect of its being shared by Indians on a large scale in the near future. The new Government of India Act provides that legislation aiming at discrimination against British commercial interests, regardless of the objects of such discrimination, is not to be permitted under the new constitution. So the monopoly of British shipping in Indian waters has been put on a more stable basis by the constitution of the country itself—at any rate for the time being.

CHAPTER XVII

CURRENCY AND EXCHANGE.

1. THE EVOLUTION OF THE COLD EXCHANGE STANDARD.

The Introduction of Silver Monometallism and Standardization of Coinage. Before the advent of the British, currency in India as a whole consisted of gold and silver coins; but in no part of the country any attempt was made to maintain a fixed legal ratio between the two varieties of coins. However, the Mahomedan rulers on the whole were more favourably inclined towards silver coinage, while the Hindu kingdoms in the South preferred gold. The position became infinitely more complicated when from the ashes of the Moghal Empire arose a large number of petty kingdoms, and they all celebrated their birth by striking their own gold and silver coins of different weights and fineness. Some idea of anomalies in the realm of currency may be had from the fact that during the early British period no fewer than 904 varieties of gold and silver coins of different weights and fineness were current in India. In these circumstances, naturally enough, no commercial transaction of any consequence could be affected without the intervention of professional bullion dealers and money changers, who reaped a rich harvest at the expense of trade and commerce of the country.

This state of affairs adversely affected both the revenues and trading operations of the East India Company. Realizing that this chaos could be ended only by the introduction of a uniform legal tender coin of its own for all its possessions in India, the Company issued, during the early years of the nineteenth century, both gold and silver coins of definite weights and fineness and at a fixed legal ratio. But the ratio could not be maintained owing to variations in the market value of the two metals, so that this bimetallic system never worked. It was not, however, till 1806 that a definite decision

in regard to discontinuing the system was arrived at. In that year the Court of Directors of the East India Company sent a despatch to the Governments of Bengal and Madras in which they discussed the desirability of adopting monometallism and the propriety of adopting the silver rupee as "the principal measure of value and the money of account," but allowing gold coins to remain in circulation without any fixed legal ratio between them and the silver rupee.

But the instructions contained in the Despatch were not acted upon until 1818 by either of the two Governments concerned. In that year the Madras Government introduced the silver rupee of one tola (180 grains) and 11/12ths fine avowedly as a substitute for the gold pagoda as a standard coin of the Presidency, but without depriving the pagoda of its legal tender quality. The mints were closed to the coinage of gold, but the pagodas already in circulation were, like the silver rupee, to be treated as unlimited legal tender, and the pagoda-rupee ratio was henceforth to be determined from time to time according to variations in the market value of the two metals. Here we have the beginnings of silver monometallism in the sense that mints were open only to the coinage of silver and the face value of the silver rupee corresponded exactly to its intrinsic value.

Silver rupees were later on introduced in other parts of the country under the East India Company, and thus each Presidency came to have a uniform coinage of its own. But the unification of currency in British India had yet to take place: for neither the rupee of one Presidency was identical in weight and fineness to the rupees of other Presidencies, nor was it recognised as legal tender beyond the boders of its own presidency. This anomaly could obviously be removed only by the adoption of a uniform system of coinage for the whole of British India, and this was done by Act XVII of 1835.

According to this Act the silver rupee weighing one tola or 120 grains and 11/12ths fine (the same as the Madras rupee of 1818) was made the standard coin and sole legal tender for all the Indian possessions of the East India Company. It also

provided that gold coins of all descriptions were to cease to be legal tenders in all the possessions of the Company, although it authorised the coinage of gold mohurs and of five, ten and thirty rupee pieces of gold. The Act of 1835, thus not only standardized coinage for the whole of British India, but also introduced full-fledged silver monometallism in the place of a sort of parallel standard system. The provision in regard to the minting of gold coins of various denominations was only a safety valve for possible future exigencies, and as such was by no means an integral part of the new system. The main provisions of the Act of 1835, however, remained in force up till 1893 when mints were closed to the free coinage of silver.

As regards the actual working of the silver standard in India, it is interesting to note that the coinage was not free: the mints charged a seignorage of z per cent, which must have been substantial enough to prevent the conversion of rupees into silver bullion to a certain extent. But as mints were open to the conversion of silver into rupees without limit, the value of the rupee corresponded closely to the value of silver: a rise or fall in the value of one being reflected by a corresponding change in the value of the other.

To complete the description of the Currency System that came into force in 1835, it may be pointed out that in the same year another Act (Act XXI of 1835) was passed which authorised the issue of token coins of various denominations, such as double pice, pice and pie, while half-pice token was issued in 1854. Apart from these, four anna and two anna silver coins were also issued, but they were legal tender up to one rupee only although their face value corresponded with their intrinsic value in the same manner as that of the rupee and half-rupee coins which were unlimited legal tender.

The Demonetization of Gold. The currency system introduced in 1835 was not quite so simple in its actual working as it looks on paper; for the opening of mints to the free coinage of gold mohurs and other coins, which were not legal tender at all made the system exceedingly complicated. In 1841 the Government tried to justify its policy in regard to

gold coinage by issuing a notification authorising the treasuries "freely to receive gold mohurs at the rates denoted by the denomination of the pieces". So far and for the next few years the silver-gold ratio had fluctuated in the neighbourhood of 15: 1, so that the acceptance of gold coins at the treasuries did not land the Government in a difficult position. But the difficulties of the Government began with the discovery of extensive gold deposits in California and Australia between 1848 and 1851 which led to a marked fall in the value of gold as measured in terms of silver. The silver-gold ratio in the market consequently came down, and people began to make payments to the Government in the overvalued gold coins, while on their part they demanded payments in silver rupees. This naturally resulted in heavy losses to the Government, so that the Government had no alternative but to withdraw the notification of 1841, which was done on January 1, 1853.

Movement in Favour of Return to Gold. It has been estimated that as a result of the demonetization of gold nearly £120,000,000 or Rs. 180,00,000 worth of gold coins went out of circulation. There was, consequently, great stringency of money in the country; and this stringency became all the more pronounced owing to the fact that India's internal and external trade were both expanding fast and supply of currency instead of keeping pace with this expansion was actually contracted to the enormous extent we have just noticed. There was, consequently, great agitation in the country in favour of remonetization of gold, and commercial communities in various parts of India memorialized the Government urging on them the necessity of re-issuing gold currency. As a result of this agitation, with which even some of the Finance-Members of the Government of India found themselves in sympathy, the Government issued a notification in November, 1864, whereby Government treasuries were authorized to accept sovereigns and half-sovereigns as the equivalent of Rs. 10 and Rs. 5 respectively, and the Government undertook to pay, when convenient and if its creditors so desired, in sovereigns and half-sovereigns. But as neither these gold coins were declared legal tender currency nor were mints opened to their free coinage in India, the new measure failed to bring much relief to the money market.

The Mansfield Commission. The Government sought a way out of the currency chaos by appointing a Commission in 1866 under the Chairmanship of Sir William Mansfield to devise a suitable currency system for India. The Commission recommended (i) that gold currency consisting of 15, 10 and 5 rupee coins should be issued, (ii) that currency should consist of gold, silver and paper. Further, being convinced that the mere opening of the mints to the coinage of gold would not meet the requirements of the situation, they expressed the opinion that gold coins should be made legal tender. But the recommendations of the Commission were never acted upon by the Government, so that the position created by the Notification of 1864 remained unaltered. Meanwhile, the value of sovereigns was increased in 1868 from Rs. 10 to Rs. 10-8 and from Rs. 5 to Rs. 5-4 respectively in conformity with the market ratio at the time.

Decline in the Value of Silver. From the year 1872 far-reaching changes began to take place in the relative value of silver and gold. After the Franco-Prussian war the German Empire decided to demonetize silver and to adopt the Gold Standard instead. A year later (1874) the various Scandinavian countries also abandoned the silver standard. Large quantities of demonetized silver poured from these countries into the market with the result that there was a sharp and heavy decline in the value of the metal. And to crown it all there came the discovery of new silver mines and improvements in the technique of the extraction of the metal, which reduced the cost of production and so depressed the value of silver still further. While the value of silver declined rapidly, that of gold moved in the opposite direction owing firstly to an increase in demand for the metal for currency purposes in various countries which had newly adopted the gold standard and secondly on account of decline in the production of the metal. It was in these circumstances that the countries of the Latin

Monetary Union (France, Italy, Switzerland and Belgium) found it impossible to maintain the double standard and had to close their mints to the free coinage of silver without, however, demonetizing the metal. The "defection" of the Latin Union made confusion worse confounded, and drove the last nail into the coffin of the silver standard.

Effects of Silver Slump on India. The immediate consequence of slump in the value of silver was that the depreciated metal began to be dumped in ever increasing quantities in all the silver standard countries, and in India the bulk of this silver was turned into rupces with the result that there was a rapid rise in the general level of prices. The fall in the gold price of silver was naturally followed by a corresponding fall in the value of the rupee as measured in terms of sterling: in 1871-72, when the price of silver stood at 60½d. per ounce, the rupee-sterling exchange was quoted at 1s. 11 1/2 d., while by 1802-03, when silver cost 30d, per ounce, the exchange rate had come down to 18. 3d. This fall in the rate of exchange, which from 1872 onward was rapid and continuous, was in its turn the cause of many an evil, of which only the budgetry difficulties of the Government of India, the adverse effects of fluctuating exchange on trade and investment of foreign capital and discontent among the European officials of the Government may be mentioned, but which we shall discuss in detail later on.

Agitation against the Silver Standard. Fluctuations in the rate of exchange and gradual and continuous depreciation of the rupee, to which we have just now referred, turned foreign trade into a gamble; for no one knew how much he would have to pay in rupees for the foreign goods imported by him. Realizing that fall in the value of silver was the root cause of all their troubles, the trading communities started an agitation against the free coinage of silver and in favour of the adoption of the gold standard. But the Government thought it was none of its business to rescue the country from the mess which its own currency policy had created. However, the day of reckoning was not far distant; Government's own financial difficulties became acute with the passage of time, and in 1878

it was itself compelled to propose to the Secretary of State (i) that gold standard should be adopted in India, and (ii) that as a preliminary measure the value of the rupee should be artificially increased by charging a heavy seignorage on its coinage. The Secretary of State (or in other womrds the British Government) turned down these proposals unceremoniously. And, having regard to the interests of their own country, they were perfectly justified in their action: for the value of gold as measured in terms of commodities had already become inconveniently high, and the adoption of the gold standard by India would have brought about the drain of gold from Britain and other countries and therefore a further fall in prices which in turn would have depressed industry and trade in those countries. Common sense and justice were pitted against self-interest, and the British Government were inspired by the latter when they refused to allow India to adopt the gold standard.

International Bimetallism. The Government of India had now no other alternative but to hope that International Monetary conferences (which were convened between 1867 and 1892 by the United States with the support of France with a view to restoring the value of silver by the adoption of international bimetallism) would somehow succeed in rehabilitating silver as a monetary standard. But the various gold standard countries in general and Britain in particular showed open aims of these conferences towards the and contrived to bring about their failure. This hostility was due to the fact that these countries, of which England had always been the ring-leader and instigator-in-chief, could not countenance the idea that part of the supplies of gold should be diverted to the various silver standard countries which the adoption of international bimetallism would have necessarily involved. They were haunted by the fear that the division of the supplies of gold would adversely affect their own industry and trade by depressing their general price level; and their fears, though inspired by selfish motives, were by no means unjustified. The last International Monetary Conference was held at Brussels in June, 1892, but this last attempt at the rehabilitation of

silver also ended in failure. Thus all hopes and expectations of the Government of India were dashed to the ground.

The Herschell Committee. The United States Government, like the Government of India, being interested in the rehabilitation of silver had passed the Bland Allison Act in 1878 and the Sherman Act in 1890 with a view to maintaining the value of silver. Under the former Act the United States Treasury was required to acquire and coin at least 2 million dollars worth of silver each month, while the Sherman Act empowered the Government to purchase 54 million ounces of silver annually for coinage. But when the Brussels Conference ended in a fiasco, the United States Government were compelled to protect their gold stocks by repealing the Sherman Act. The price of silver had been steadily falling during the past two decades, and the repeal of the Sherman Act made that fall more pronounced.

Even while the Brussels Conference was sitting, the Government of India anticipating the repeal of the Sherman Act and therefore a crash in the gold value of silver in the event of failure at Brussels, sent a despatch to the Secretary of State (June, 1892) urging the necessity of closing mints to the free coinage of silver and the adoption of the gold standard in case the Brussels Conference failed to come to a favourable decision in regard to silver. The upshot of these representations and the failure of the Brussels Conference was that in the same year (1892) the Herschell Committee was appointed to examine and report on the currency and exchange problems of India in the light of the proposals of the Government contained in their despatch of June, 1892.

The Report of the Herschell Committee. We have seen that the fall in the gold price of silver was followed by a corresponding fall in the value of the rupee as measured in terms of sterling. The Herschell Committee examined in detail the effects of this decline (which was expected to become more marked in the future) on the finances of the Government of India, and found that as the Government had to remit annually large sums (nearly £17 million) to meet the home charges, which

involved the conversion of silver rupees (which were mainly the proceeds of taxation in India) into sterling, the depreciation of the rupee necessitated heavier expenditure in rupees for the purchase of a given amount in sterling. Thus not only the burden of home charges on the Government and therefore the tax payer, increased, but also the falling exchange introduced an element of uncertainty in the finances of the Government. for as no one could foresee the extent of depreciation during the ensuing year, even surplus budgets sometimes turned out to be deficit budgets in the end. To this we may add that this budgetry uncertainty must have been further increased by a steady and continuous rise in the internal price level which must have tended to increase governmental expenditure on services and commodities within the country. The gap in the budget could obviously be made up either by increasing the revenues through increased taxation or by an all round retrenchment; but the Committee gave it as their opinion that it was not possible for the Government to resort to any of these expedients under the prevailing conditions.

The Committee next proceeded to examine the effect of falling exchange on the people of India. They rightly began by explaining that "the extent of the burden imposed upon the people of India by their remittances is measured by the quantity of produce which they represent, for it is by the export of produce (or the balance of exports over imports) that the debt is in reality discharged," and proceeded to conclude that "when silver falls in relation to gold, the greater number of rupees which is required to meet a given gold payment will not represent a greater quantity of produce than before, if the silver price in India of the produce exported respond to the changed value of silver in relation to gold, i.e. if it has risen, or has been prevented from falling. Silver prices must ultimately thus respond, although an interval may elapse before the process is complete; and during this time whilst more produce is exported, the Indian ryot is getting proportionately less in silver for his produce", which means a corresponding loss to him.

As regards the effect of exchange fluctuations on the foreign trade of the country, it is a well-known fact that uncertainties in regard to the rate of exchange and constant changes therein reduce trade to the level of gamble in exchange itself: for under these circumstances no one can forecast with certainty the amount he will have to pay for goods imported from foreign countries. Taking these facts into consideration the Committee came to the conclusion that "it would be well if commerce were free from the inconveniences of fluctuations which arise from a change in the relation between the standard of value in India and in countries with which her commerce is transacted." Falling Exchange, however, stimulates exports, but, as the Committee pointed out, "the effect of each successive fall must be transitory, as it can continue only until circumstances have brought about the necessary adjustment" between the rate of exchange and the general price level in the country.

The Committee also enquired into the effects of the fall in the gold value of the rupee on the flow of foreign capital into India and came to the conclusion that this fall had been responsible for checking the investment of foreign capital in India and therefore the economic development of the country. They argued that "uncertainty as to the interest which would be received for the investment, and as to the diminution which the invested capital might suffer if it were desired to retransfer it to this country (Britain) tends to check British investments in India." But, as pointed out by the Herschell Committee itself, causes other than the fall in the exchange value of the rupee were partly responsible for bringing about a decline in foreign investments, and of these the unwillingness of British capitalists to invest in industry owing to gradual fall in gold prices, and the unwillingness of the London money market to enter upon silver transactions (whose future value could not be ascertained with any degree of accuracy) were the most important.

The Committee also examined the complaint that the adoption of the silver standard and the opening of mints to the

free coinage of silver had led to the imports of that metal in enormous quantities and that these savings had been reduced in value as a result of the fall in the gold value of the rupee, and came to the conclusion that India had undoubtedly suffered a loss in consequence of the monetary policy of her Government, but that the extent of this loss was not easy to determine.

Lastly, the Committee found that continued fall in the gold value of the rupee brought about discontentment among Government's European officials and European employees of industrial and commercial undertakings in India. This discontentment was due to the fact that Europeans in India were paid by their employers in silver rupees whose value as measured in terms of various gold currencies was continually declining, so that they had to find larger amounts in rupees for remittance to their homes abroad.

Recommendations of the Herschell Committee. The Committee were thus convinced of the futility and dangers of maintaining silver monometallism in India with her heavy gold obligations; for stability in the rate of exchange was necessary in the interests of the finances of the Government of India as well as of the foreign trade and economic development of the country, and that stability could not be had while the gold price of silver fluctuated from day to day. The need for fixing the exchange value of the rupee was thus apparent; and the Government of India proposed to the Committee that the mints should be closed to the free coinage of silver, and by thus restricting the supply of the rupee its gold value may be artificially increased from 1s. 3d. (which was the exchange rate in 1802) to 1s. 6d. The Committee agreed that the mints should be closed to the free coinage of silver, but they recommended that the Government should undertake to issue rupees to the public in exchange for gold bullion or coin at 15. 4d., and that gold should be accepted at the Government treasuries in payment of public dues at the same rate.

In making these recommendations the Herschell Committee were inspired by the belief that by subjecting the coinage of rupees to limitations the exchange value of the rupee would rise, and that if the Government undertook to convert gold bullion and sovereigns into rupees at the rate of 15. 4d., it would be possible to prevent the value of the rupee from rising above that level. By these means the exchange value of the rupee was to be stabilized, and incidentally the rupee was to be converted from a full value coin into a token coin by keeping its exchange value above the value of its metallic content. The object of this fixation of rupee-gold ratio was the ultimate introduction of the gold standard, but no provision was suggested by the Committee to introduce this change in the monetary system of the country; the adoption of the gold standard would have imposed an obligation upon the Government of India to issue gold in large amounts which in turn would have necessitated the creation of a gold reserve during the transition period; and the Committee imposed no such obligation upon the Government.

The Demonetization of Silver and the Evolution of the Gold Exchange Standard. The proposals of the Herschell Committee were accepted by the Covernment of India, and by Act VIII of 1893 Indian mints were closed to the free coinage of both gold and silver. The Act, however, gave powers to the Government to coin silver rupees on its own account. At the same time three notifications were issued whereby (i) gold bullion and coins were to be received at the Indian mints and exchanged for rupees at the rate of 1s. 4d. per rupee; (2) sovereigns and half-sovereigns were to be accepted by Government in payment of public dues at the rate of Rs. 15 and Rs. 7½ respectively; and (3) currency notes were to be issued in exchange for gold coin or bullion at the same rate.

The obvious defect of the system as introduced by the Act of 1893 is that in the absence of any obligation on the part of the Government to issue gold in exchange for rupees or currency notes there was nothing to prevent a further fall in the exchange value of the rupee, more particularly in the event of an unfavourable balance of trade, far less to bring about an immediate appreciation in the rate of exchange. At the time the Report of the Herschell Committee was published, the rate

of exchange stood at 1s. 25% d. and, as it happened, the provisions of the Act of 1893 proved to be far too inadequate not only to bring about an immediate rise in the exchange value of the rupee to 1s. 4d. but even to prevent a further fall in the rate of exchange.

The causes of further fall in the rate of exchange, to which we have just alluded, are not far to seek. To begin with, although the Act of 1803 was passed in the month of June, the provision regarding the closing of mints to the free coinage of silver did not come into operation till the beginning of the following year when the stocks of silver at the mints were completely exhausted. Meanwhile, the imports of silver were allowed to continue, and a geater part of this silver was turned into rupees. Now, owing to the repeal of the Sherman Act in the U.S. A. (November, 1893) and the abandonment of the silver standard by India herself the price of silver fell still further, so that conditions for a further fall in exchange were most suitable, although it must be conceded that the closing of the mints in 1804 prevented the fall in the rate of exchange from being as heavy as the fall in the price of silver had been. There can be no doubt that had not famines and plague devastated India during the years 1896-98 and seriously reduced the productive capacity of the country, the expansion in the volume of trade would have been quite substantial, and this coupled with the non-expansion of currency would have much sooner forced the exchange value of the rupee up. But even as it is, we find that the downward movement of the rate of exchange was arrested in 1895, and thereafter exchange moved steadily in India's favour until it touched the 1s. 4d. level in 18gg.

The Appointment and Recommendations of the Fowler Committee. In March, 1898, the Government of India finding the achievement of the goal of 1s. 4d. exchange rate already in sight, sent a despatch to the Secretary of State urging the necessity of bringing to an end the period of transition, and proposing that steps should immediately be taken with a view to establishing the gold standard in India. As a result a

Committee was appointed under the Chairmanship of Sir H. H. Fowler in April, 1898 to recommend measures for the establishment of a satisfactory system of currency in India and for securing a stable rate of exchange between India and Britain.

The Government of India in their despatch to the Secretary of State had proposed (1) that they should be empowered to raise a loan of £20,000,000 in England of which £5,000,000 may be remitted to India in the form of sovereigns to form a nucleus of gold reserve for the establishment of the gold standard; (2) that nearly 21/2 crore rupees should be withdrawn from circulation and melted down in order to raise the exchange value of the rupee to exactly 1s. 4d., and the silver obtained by melting down these rupees should be sold and the gold obtained in return should be put in reserve; and (3) that the Government should not be under any obligation to make payments from these gold reserves until sovereigns had become sufficiently current in India. It will be noticed that at the time the despatch containing these proposals was sent, the rupee-sterling exchange had not reached the 1s. 4d. level and that the aim of the Government in making these proposals was to raise the exchange value of the rupee to that point. These proposals were inspired by the belief that the rise in the exchange value of the rupee since 1895 had been due entirely to the closing of the mints to the coinage of rupees, and that the process could be expedited by actually contracting the volume of rupee circulation.

The Fowler Committee pronounced their judgment against this belief by expressing the opinion that apart from the contraction of currency relatively to the demand (which had been increasing owing to the expansion of the volume of trade since 1893) various other factors must also have operated in favour of a rise in the exchange value of the rupee during 1805-99, so that they could not see their way to recommending such drastic measures as proposed by the Government of India.

Arguments in favour and against Return to Silver. The Fowler Committee also considered, among others, the proposal for the reopening of mints to the unrestricted coinage

of rupees or reversion to silver monometallism. The supporters of this proposal argued that an artificially over-valued rupee imposed a serious handicap upon Indian exports in competition with silver standard countries whose trade was expanding at India's expense owing to the continual depreciation of their currencies, and that the depreciation of the rupee, to which the opening of the mints would inevitably give rise, would improve India's export trade. The Committee refuted these contentions by reiterating the arguments of the Herschell Committee to the effect that, even assuming the arguments in regard to a stimulus to production to be sound, "the effect of each successive fall in exchange must be transitory and could only continue until circumstances have brought about the inevitable adjustment." It was further pointed out by the Fowler Committee that exchange fluctuations (which must be in evidence in the case of silver standard) exercised a harmful influence on the trade of the country with gold standard countries, and that as "over four-fifths of India's seaborne trade is with gold-standard countries, it follows that the balance of advantage is heavily in favour of stability of exchange with gold standard countries; and accordingly, considered by itself the unstability of exchange, which must be anticipated from reopening the Indian mints to silver, is a powerful argument against taking the step."

The Lindsay Scheme. Various other schemes were put before the Committee, of which that devised by Mr. A. M. Lindsay, Treasurer of the Bank of Bengal, deserves special attention on account of the fact that it anticipated to a considerable degree the system that came to be evolved and adopted in India during later years. Briefly, Mr. Lindsay proposed that a loan of £10,000,000 should be raised in London, and this amount, which was to be deposited with the Bank of England, was to serve as a gold standard reserve. In the case of an adverse balance of trade, sterling drafts were to be sold in India at 18. 3¾d. (which is the gold export point) and were to be paid out of this fund, and thus a fall in the rate of exchange below 18. 3¾d. was to be prevented. In India a rupee section

of the gold standard reserve was to be kept; and in case a favourable balance of trade created a demand for rupees in London. Council Bills were to be issued by the Secretary of State at 1s. 4 1/16d, to the remitters of funds to India, and these bills were to be paid out of the rupee section of the gold standard reserve, thus preventing a rise in the rate of exchange above 1s. 4 1/16d. It is obvious that the sale of sterling drafts would lead to the accumulation of rupees in India and would deplete the gold reserves in London. Mr. Lindsay proposed that these surplus rupees should be melted down and the silver thus obtained should be sold for gold which should be accredited to the gold standard reserve in London. If, on the other hand, the sale of council drafts led to the depletion of the rupee section of the gold standard reserve in India, a part of the gold reserve in London was to be utilized for purchasing silver which was to be turned into rupees to fill the gap in the rupee section of the reserve. The Fowler Committee rejected this scheme on the ground that (1) it would base for all time India's gold standard on a few million pounds worth of gold in London while it would involve a liability to pay gold, in the event of demand for sterling in India, to an indefinite extent, and (2) that the adoption of the scheme would, owing to exchange uncertainties, retard the investment of foreign capital in India and therefore check her economic development.

The Lesley Probyn Scheme. Another scheme which anticipated monetary changes to a remarkable extent, and of which the Hilton Young Commission's gold bullion standard is only a modified and more elaborate version, was the one presented before the Fowler Committee by Mr. Lesley Probyn. The author of this scheme realized the difficulties of putting gold currency into actual circulation in an extensive country like India whose requirements in the matter of currency were vast and where coins continually went out of circulation owing to its people's hoarding propensities. Mr. Probyn was far ahead of his times when he propounded the theory (which has come to be universally accepted by now and upon which most of the countries in the world now base their monetary practice)

that the adoption of the gold standard does not necessarily involve the actual circulation of gold coins, or the making of gold coins the only unlimited legal tender in the country. To base the currency system of India on these lines he proposed (1) that the Government should issue new currency notes of the denomination of Rs. 10,000; (2) that these notes should be issued in return for gold tendered to the Government, and should be payable at the option of the holder either in rupees or in gold; (3) that gold may be paid, when demanded, in exchange for these notes either in sovereigns or gold bars of not less than £670; and (4) that notes of smaller denominations may be issued as usual, but these notes were, as before, to be encashable in silver rupecs only. By these means, it was expected, imports of gold into India for currency purposes would be encouraged and in course of time there would be sufficient gold in reserve to enable Government to pay in gold for all rupees and currency notes when presented in sums of Rs. 10,000 and over. As gold for non-monetary purposes would be imported into India no matter what currency system the Government adopted, notes and rupees would be presented for conversion into gold in such large amounts mostly for international payments, so that the rupee would remain the medium of exchange for all internal purposes.

It will be seen that the Probyn scheme was, broadly speaking, not far different in principle from the scheme propounded by the Hilton Young Commission and acted upon by the Government of India a quarter of a century later. But the Fowler Committee found a number of objections against the scheme and its underlying principles, and so turned it down. They refused to be harrassed by the hoarding habit of the people (which Mr. Probyn was so anxious to circumvent), and gave it as their opinion that "If hoarding did not render a gold circulation an impossibility in the past, we look for no such results in the future. The hoarding habit in short did not present such practical difficulties as to justify a permanent refusal to allow India to possess a gold currency." Again, they objected that while gold bullion was universally recognised

as an international medium of exchange, in no case had it been adopted for purposes of internal currency, and that it would be contrary to universal practice to prevent the standard metal from circulating within the country in the shape of coin and thus performing the function of a medium of exchange for internal purposes also.

Recommendations of the Fowler Committee. Having rejected all the various schemes put before them, the Fowler Committee gave it as their opinion that the stability of exchange could be secured only by the adoption of the gold standard with gold currency in effective circulation, and with a view to enabling India to have an effective gold standard they recommended:—

- (1) that the sovereign and half-sovereign should be made legal tender in India, and Indian mints should be opened to their free coinage;
- (2) that the Government should continue the practice of giving rupees for gold, but the coinage of rupees was not to be undertaken by the government until the proportion of gold coin in the currency was found to be in excess of public requirements;
- (3) that if the coinage of fresh rupees was ever undertaken, the profits on that coinage (or the difference between the intrinsic and face values of those rupees) should not be regarded and used as ordinary revenues of the Government, but should be put away as a "special reserve" for making it available to the public for export purposes in the event of an adverse balance of account, in addition to gold from ordinary reserves and such quantities of the metal as might be available from circulation;
- (4) that when adequate quantities of gold have been accumulated in the reserve and gold is available in Government treasuries, the Government should meet, as far as possible, its obligations in gold;
- (5) that the rupee like the sovereign, should remain unlimited legal tender although by artificially increasing its

value it had been reduced to the position of an ordinary token coin: and

(6) that the value of the rupee in terms of gold should be fixed at 1s. 4d. which was the rate prevailing at the time the Committee's report was written.

It is obvious that in making the above recommendations the Fowler Committee was aiming at the introduction of, or at any rate was inspired by, the limping standard of the Latin Monetary Union. The chief feature of this system was that while both gold and silver coins were unlimited legal tender with a fixed ratio, the mints were open only to the free coinage of gold, and the ratio between the two varieties of coins was maintained, as in the case of ordinary token coins, by limiting the issue of silver coins. It is also obvious that when the rupee had been reduced to the position of a token coin and when gold had been demonstized for a considerable length of time, the only way in which the currency system of India could have been based on gold with the least expense and disturbance to trade was by proceeding on the lines suggested by the Fowler Committee. But the coinage of rupees had already been discontinued; the rupee-gold ratio had already been pushed up to and maintained for some months at 1s. 4d.; the Government was already giving rupees for gold; the rupee was already an unlimited legal tender. In these circumstances the scheme recommended by the Fowler Committee involved no innovations except the adoption of the British sovereign as a co-legal tender with the silver rupee and, which is an essential condition for the introduction of an effective gold standard, the opening of the mints to the free coinage of gold; and as such the latter measures may be regarded as a corner-stone in the edifice designed by the Fowler Committee.

Government's Action on the Report. The Government of India accepted the recommendations of the Fowler Committee, and promptly made the sovereign and half-sovereign legal tender in India by Act XXII of 1899. But as the coinage of sovereigns could be undertaken only by the Royal Mint in

London or its branches, the Government of India approached the British Treasury with a request for the opening of a branch in India. The request was ignored, and in reply the Government of India received an elaborate sermon on the wastefulness of starting a gold mint in a country like India. Thus the first essential condition for the introduction of the gold standard was not satisfied.

Resumption of the Coinage of Rupees. The suspension of the coinage of silver in 1804 coupled with an increase in the volume of trade had, in the meanwhile, given rise to great stringency of money in India. The Government had endeavoured to tide over the difficulties by passing an Act in 1898 which provided that the amounts realized by the sale of Council Bills in London could be set aside in gold at the Bank of England as part of the Indian Paper Currency Reserve, thus enabling the Government of India to issue notes against this gold in order to meet those bills when presented for payment. The outcome of this policy was that, as the notes could be issued against gold which was lying in London and as they would be encashable in rupees only, the rupee reserves of the Government of India (which were now strictly limited owing to the closing of the mints) were unduly strained in times of emergency when these notes were presented for encashment. But now the Act of 1899 had altered the whole situation. Sovereigns were unlimited legal tender, and although the "luxury" of a gold mint had been denied to India by the British Treasury, there was nothing to prevent India's foreign debtors from paying their trade dues in sovereign which were always obtainable in London for export purposes. The Government also began to take advantage of the changed circumstances, and, partly with the object of familiarizing the people with the use of gold, it began to meet its obligations in sovereigns which had already accumulated in sufficiently large quantities in its reserves.

But the Government started experimenting with the gold standard at a very unfortunate hour. During the years 1899-1900 India experienced one of the worst famines on record, and

it was during this period of scarcity that Government began to put sovereigns into circulation-notwithstanding the fact that in times of general scarcity small value coins, and not such high value units as the sovereign, are generally in demand. As might have been expected by a more imaginative Government. a fairly large percentage of the sovereigns that were put into circulation through the agency of currency offices, post offices, district treasuries, railways and others were returned to the Government. It is obvious that the unwillingness of the people to retain sovereigns was due to inconvenience that this retention involved in a time of scarcity and it seems certain that had the Government persisted a little while longer-till normal conditions had returned—the pace of the sovereign's return journey to the Government would have appreciably slackened. If the worst had befallen and if the Government had no way out of the difficulty, it could have easily resorted to fresh legislation making the payment of rupees for notes and sovereigns depend upon Government's option, thus ensuring the successful introduction of the gold standard and incidentally the desired monetary and exchange stability. If even after the restoration of normal conditions the demand for rupees had persisted, the remedy would have been, as had been recommended by the Fowler Committee, the putting of some additional rupees into circulation and not the abandonnent of the Fowler Committee's scheme. But it seems the Government had launched the scheme half-heartedly; for no sooner the demand for rupees manifested itself than it abandoned the idea of putting gold into circulation, and embarked upon the senseless career of coining fresh rupees without limit on its own account early in 1900 after giving the new system only a few months' trial. It may be mentioned at this stage that the silver for the coinage of fresh rupees was bought with the gold which was held in the Paper Currency Reserve in London. Thus contrary to the spirit of the recommendations of the Fowler Committee, the Government instead of taking steps to increase its stocks of gold with a view to introducing the gold standard, actually engaged itself in reducing those reserves.

To say the least this use of the Paper Currency Reserve was unwarranted if not mischievous; its legitimate function was to ensure the convertibility of notes and not to buy silver for the coinage of rupees.

The Abandonment of the Fowler Scheme. The Fowler Committee, it will be remembered, had as the object of its various recommendations the ultimate adoption of an effective gold standard, so that the opening of mints to the free coinage of gold and the putting of sovereigns into circulation may be regarded as the corner-stones of its scheme. In these circumstances the refusal of the British Treasury to open a branch of the Royal Mint in India, or the absence of a gold mint, and the unwillingness of the Government of India to ensure the circulation of gold meant, for all practical purposes, the abandonment of the Fowler scheme. But once the ball had been set rolling, it became necessary to abandon or to reshape the various complementary parts of the scheme according to the requirements of the changed circumstances, but without the Government and the Secretary of State realizing, or caring to realize, where those haphazard changes were likely to land the currency system of the country. To begin with, the Fowler Committee had recommended that if it ever became necessary for the Government to coin fresh rupees, the profits on their coinage should be kept apart in gold as a special reserve. Accordingly. after the coinage of rupees was resumed in 1000, the Government of India proposed to the Secretary of State that the upper limit for gold in the paper currency reserve should be fixed at £7,000,000, sums in excess of this amount to be used for purchasing silver for the coinage of rupees (which shows that even in 1900 the Government had come to regard the regular coining of rupees as a normal part of its currency policy); that the profits on the coinage of rupees should be put away in a special gold reserve (or the gold standard reserve) apart from the gold in the Paper Currency Reserve; and that the interest on the invested portions of the Paper Currency Reserve should also be put away in the special gold reserve. But the Secretary of State held that as payments out of this reserve would have to be

made in London in the event of an unfavourable balance of account and other emergencies, it should be located in London and not in India, and he decided to get the profits on the coinage of rupees remitted to London and invested in sterling securities instead of being kept in the shape of a special gold reserve.

Up to 1006 the Government maintained no other reserve in India excepting a part of the Paper Currency Reserve. But as the coinage of fresh rupees could not always keep pace with the demand for currency in consequence of the operations of favourable trade balances, a special reserve of coined rupees was created in that year by diverting a part of the profits on the coinage of rupees for that purpose. It was in these circumstances that, in addition to the sterling branch of the gold standard reserve, the rupee or silver branch of the gold standard reserve came to be established.

It will be remembered that the Secretary of State had already mutilated the Fowler Scheme by investing the gold in the sterling branch of the Gold Standard Reserve in sterling securities instead of keeping it in gold. This decision was bad enough as the investment of reserves tended to introduce an element of uncertainty in the value and efficacy of these reserves; but in any case these investments represented assets which were steadily realizable in gold in the event of an adverse balance of account. But a more dangerous decision had vet to come. In 1907 the Secretary of State decided to set aside half the profits on the coinage of rupees for railway development in India until the Gold Standard Reserve amounted to £20,000,000; and after the reserves had touched this level the entire profits were to be used for railway development purposes. The Government of India protested against this decision, but in vain; the Secretary of State did actually divert more than £1,000,000 for this purpose, but he was prevented from doing further mischief by the intervention of the exchange crisis of 1907-08 which we are about to discuss.

Not content with these measures, the Secretary of State actually went to the length of preventing the flow of gold into

India which might have occurred had he kept his hands off the exchange market. Under normal conditions a favourable balance of trade would have compelled India's foreign debtors to send sovereigns (which were, like the rupee, unlimited legal tender in India) to India in settlement of their obligations, a greater part of which would have certainly found their way into circulation. This movement of gold was deliberately kept in check by the Secretary of State through the operations of his Council Drafts sale system. We have seen that in 1808 the Secretary of State had started the practice of selling Council Drafts for gold in London; and against this gold (which was kept in the Paper Currency Reserve in London) the Government of India issued notes of corresponding amounts to the holders of Council Drafts. This system of issuing notes against metallic cover lying in a foreign financial centre had its limitations, for it was likely to land the Covernment in difficulties in case the notes thus issued were presented for encashment. But this difficulty had now been removed by the resumption of rupee coinage which enabled the Government to meet its paper currency obligations in rupees. This change in the situation was fully availed of by the Secretary of State from 1904 onwards when he descended upon the exchange market with a standing offer to sell Council Bills without limit at 1s. 41/6d. (which was the gold export point) and later on at a rate even below this point. The net result of these measures was that the exports of sovereigns to India were greatly reduced. Since in making these provisions India's rulers were not basing their actions upon any scientific principle, it seems that behind these activities there was lurking a desire not only to deprive India of the use of gold standard at the time but also to cut out all possibility of its adoption at any time in the future without heavy financial loss and sacrifice.

The Crisis of 1907-08 and its Lessons. The years 1901-06 were, from the economic point of view, normal in every respect: the trade balances were favourable so that the Government experienced no difficulty in meeting the home charges and liquidating the favourable trade balance by means of fresh

coinage of rupees or the issue of paper currency backed by sterling and rupees. But the intricate currency system that had gradually been evolved since 1900 had yet to prove its efficacy and workability in the event of an adverse balance of account when, apart from the sterling requirements of the Secretary of State, payments in gold would have to be made to India's foreign creditors, if the breakdown of the rupee-gold exchange ratio was to be avoided. That opportunity of testing India's currency system was not longer in coming. The year 1907 experienced considerable deficiency in rainfall, with the result that agricultural production in India suffered heavily, and this decline was reflected in exports from the country. To make matters worse the purchasing power of Europe and America had been adversely affected by monetary stringency consequent upon financial crisis in the United States, and this resulted in a fall in demand for Indian produce. On the other hand the value of imports into India far from showing a decline actually registered an increase owing to a sharp fall in the price of certain foreign products. The result was an adverse balance of trade and the cessation of demand for Council Bills.

In order to meet their obligations in London the Exchange Banks asked the Government of India to sell telegraphic transfers in London, which the latter refused to do. As a result the exchange, which had been showing signs of weakness for some time, dropped to the level of 1s. 3 11/16d. which was 7/32d. below the gold export point. Even this breakdown of the exchange brought forth nothing more drastic than the offer of gold from the Paper Currency Reserve for export purpose, and even that on the condition that not more than £10,000 was to be given on any day to any one individual or firm. Finding no improvement in the situation, the Secretary of State was obliged to instruct the Government of India to sell Reverse Councils or sterling drafts on London at the rate of 1s. 29/32d. per rupee, while he on his part arranged to meet these obligations in London partly by realizing some of the securities belonging to the Gold Standard Reserve and partly by releasing gold from the Paper Currency Reserve against the transfer of rupees to the Indian branch of that reserve. Again, as the reserves in London did not appear to be sufficiently strong to meet additional demands on them, he floated a loan of £4,300,000 to enable him to meet his own expenses. The stocks of gold and sterling securities in the reserves were now exhausted, so that the continuance of demand for sterling through the operations of an adverse trade balance would have necessitated the flotation of bigger loans in London to meet the demands of trade if the complete breakdown of the exchange ratio was to be avoided. But, luckily for the Government, the export trade revived during the following year, which strengthened the exchange and thus rendered the further sale of Reverse Councils unnecessary. But it was not till about £18,000,000 in gold had been disbursed from various reserves in India and London that the stability of exchange had been attained, and this sum represented very nearly the total capacity of all the reserves at that time.

The crisis of 1907-08 was not without its lessons for the Government of India. It showed, in the first place, that in order to maintain the exchange ratio it was necessary not to withhold the issue of gold for the settlement of India's indebtedness, but to make it available without any hitch and in as large quantities as desired by the public. Secondly, the fact that a short and mild crisis had almost completely exhausted Government's gold resources, the Government were now convinced of the necessity of maintaining larger reserves than had been done hitherto. And lastly the Government now appreciated the necessity of keeping their gold resources in liquid form, rather than investing them in securities or in financing commercial enterprises.

Government of India's Proposals. Profiting by their experience during the short-lived crisis of 1907-08, the Government of India were in a position to put some sound and definite proposals before the Secretary of State. In their despatch dated April 1, 1909, they urged the necessity of keeping larger gold reserves in order to be able to face a more serious crisis than that of 1907-08, and proposed that the Gold Standard Reserve

should contain at least £25,000,000 in addition to the gold in the Paper Currency Reserve, and that the profits on the coinage of rupees should not be utilized for the development of railways in India until the sterling branch of the Gold Standard Reserve touched the suggested limit. Again they proposed that as during a crisis the securities could not be readily disposed of without a loss, a substantial part of the Gold Standard Reserve should be kept in the form of gold instead of being invested in sterling securities. The Government of India further suggested that at least two-thirds of the gold held in the Paper Currency Reserve should be kept in India; and in support of this suggestion they pointed out in their next despatch of September 30, 1000, that "there were indications of a greatly extended use of the sovereigns in commercial transactions" at the time, so that they deemed it desirable to increase gold holdings in India in place of rupees in the Paper Currency Reserve. They were obviously justified in believing that they "could face another exchange crisis with far greater equanimity" if they could be assured both of an active circulation of sovereigns in the country and of a strong reserve in their currency chest*; for they thought that the active circulation of sovereigns would result in the export of redundant gold in circulation in times of weak exchange which would help to strengthen the exchange, while the free use of gold from their own reserves would at once restore public confidence. To push the matter to its logical conclusion, the circulation of sovereigns could not have been encouraged systematically or seriously without the provision of facilities for the minting of sovereigns; but strangely enough it was not till about the middle of 1912 (and even then as a result of the initiative taken by Sir Vithaldas Thackersey in the Imperial Legislative Council) that the Government of India suggested to the Secretary of State that facilities for the coinage of sovereigns in India should be provided.

^{*} Cf. B. C. Dadachanji · History of Indian Currency and Exchange, P. 81.

The Secretary of State's Decision. The Secretary of State tardily recognized the necessity of keeping a minimum of £25,00,000 in the Gold Standard Reserve, but could not agree to keep more than £1 million in liquid form, and even this trifle he proposed either to invest in short-term loans or to hold in bank deposits. And refusing to profit by his past experience, he decided to invest the balance in consols and other stock. brushed aside the suggestion of the Government of India with regard to the location of gold in the Paper Currency Reserve by announcing in a prophetic vein that in the event of weak exchange gold in circulation would not be available for export purposes. And in support of his insistence upon keeping the entire gold reserves in London he once again repeated the familiar argument that the gold held in London would be available for supporting the exchange not only when the rate fell to the gold export point but also during the earlier stages when the weakening of exchange begins to manifest itself and when it is desirable to support it by suspending sale of Council Bills, i.e. when gold in the reserves can be used for meeting the Secretary of State's own expenses. As regards the coinage of sovereigns in India, he suggested the minting of a ten-rupee gold coin instead of the sovereign in order to circumvent the difficulties that had again arisen in connection with the opening of a branch of the Royal Mint in India; but it was subject to the approval of the Chamberlain Commission which had in the meanwhile been appointed to inquire into the problem of Indian currency.

The fact that the Government of India had suggested the building up of ampler gold reserves and the location of a substantial part of those reserves in India has often been interpreted as indicating a desire on their part to keep the adopting of the gold standard as their ultimate goal, and the same goal is sometimes seen lurking behind the Secretary of State's permission to open a gold mint in India. But it is not difficult to prove that neither the Government of India nor their master in London had the remotest intention of ever taking any steps in the direction of the restoration of the gold standard; for, obviously enough, the limitation of the sale of Council Bills strictly in

accordance with the Secretary of State's own requirements and therefore the free inflow of gold into India should have been the first step in that direction, and the Government of India hardly ever contemplated, far less recommended, such a course. In these circumstances a gold mint in India would have been a toy for Indians and the Government of India to play with; for if the Secretary of State was always willing to sell (as he had announced his intention to do) Council Bills for unlimited amounts, nobody would have ever thought of making remittances to India by the more expensive method of exporting gold, unless the supplies of gold on their way to London could somehow be diverted to India, which would save insurance and freight charges, but which could not be done very often. these circumstances it is highly problematical if the projected gold mint would have ever justified its existence, and as such it is difficult to see how its presence, if it had ever materialized, would have in any way anticipated the adoption of the gold standard.

The Main Features of the Gold Exchange Standard We may now examine the chief characteristics of the currency system that came to be evolved after the closing of Indian mints to the free coinage of silver in 1803. We have seen that the closing of the mints had resulted in giving scarcity value to the rupee and therefore in divorcing the face value of the rupee from the value of its metallic content. In this sense the rupee had become a token coin. But, unlike token coins in various gold standard countries, the rupec was unlimited legal tender in India. Under the new system the sovereign was also unlimited legal tender, but there was no arrangement for the minting of gold into sovereigns. The measure of value, on the other hand was the rupee, whose gold value was fixed and maintained at 1s. 4d. And lastly, although the sovereign was, along with the rupee, unlimited legal tender, the Government was not legally bound to give sovereigns for rupees, although it undertook to give rupees for sovereigns.

Apart from the peculiar position of the sovereign and the token rupee in India's currency system, we have also to note

the fact that under the new system the Government enjoyed complete monopoly in the matter of currency issue, and this monopoly gave the Government power to regulate the issue and withdrawal of currency according to its own whims and fancies. and not strictly according to the requirements of trade and commerce. So long as the mints were open to the free coinage of rupees (and the face value of the rupee corresponded to its intrinsic value), the expansion and contraction of currency took place automatically without the intervention of Government: for in times of brisk demand for currency, consequent upon the expansion of internal and foreign trade of the country, the supplies of currency could always be increased by the public by getting silver bullion converted into rupees at the mints. while on the other hand in times of trade depression (when there would be a superfluity of rupees in circulation) the volume of circulation could be easily contracted by the public by melting down the rupees. But when the mints were closed to the free coinage of silver, this automatic expansion and contraction of currency ceased. The desired automatism in the expansion and contraction of currency, however, would have been introduced without changing the position of the rupee itself had mints been open to the free coinage of the other unlimited legal tender coin-the sovereign.

The Maintenance of the Rupee-Sterling Ratio. But under the gold exchange standard system while the rupee was the measure of value and medium of exchange for internal purposes, for external purposes the sovereign was the standard, and, as we have already pointed out, the exchange value of the rupee was fixed at one-fifteenth of the sovereign. The question now arises: how was this exchange value maintained? We have seen that the profits from the coinage of rupees were put away in a special reserve, known as the Gold Standard Reserve, and that a part of these reserves was kept in the form of gold and sterling securities in London and formed the gold or sterling branch of the Gold Standard Reserve, while the other part was kept in India in the form of rupees and formed the Rupee branch of that Reserve. Apart from the gold belong-

ing to the Gold Standard Reserve, the gold belonging to the Paper Currency Reserve was also kept in London. These reserves formed an integral part of the gold exchange standard system, and served as the back-bone of the rupee-gold ratio. Let us now see how the value of the rupee was prevented from rising above 15, 4d., as might have happened in the event of a favourable balance of account. Obviously enough in a case like this the demand for rupee bills abroad would increase which, unless some special measures were taken to meet this demand, would tend to raise the rate of exchange. And the special measures designed to counteract the effects of increased demand for remittances to India took the following three forms. Firstly, as in 1803 the Government had undertaken to accept sovereigns and half-sovereigns in payment of public dues and later on had declared sovereigns and half-sovereigns unlimited legal tender, the foreign debtors of India could discharge their obligations by exporting sovereigns to India. Secondly, the Government undertook to issue to the public silver rupers and currency notes in unlimited quantities in exchange for gold bullion and sovereigns at the rate of 1s. 4d. to the rupee, so that by this provision the gold value of the rupee was effectively maintained at that level, or in other words the rupee-sterling ratio was prevented from rising above 1s. 4d. having realized that the demand for remittances to India would arise only in the event of a favourable trade balance, which would ordinarily result in the export of sovereigns to India, and that some of these sovereigns would be exchanged for rupees, the Government made arrangements for the transference of those balances to India by accepting sovereigns or gold in London and by issuing the equivalent amounts of rupees or currency notes in India. This transference was made through the sale of Council Bills in London by the Secretary of State in Council, which authorized the holders of these bills to receive from the Government of India rupees in return for the sovereigns delivered to the Secretary of State in payment for these bills. The price charged for these bills ranged between 1s. 4d. and 1s. 41/d. per rupee (the gold export point) according

to demand for them The Secretary of State credited the gold or sovereigns he received in payment for these bills to the Paper Currency Reserve when the sale of these bills was followed by the issue of fresh currency notes of corresponding value in India, or to the Gold Standard Reserve when the Government made payments against these bills either (a) from cash balances in its treasuries, or (b) from the rupee branch of the Gold Standard Reserve, or (c) by minting fresh rupees. These sources of making payments in rupees would obviously be adequate to meet all the possible demand for rupees and therefore to prevent the appreciation of the rupee above the 1s. $4\frac{1}{3}$ d. level.

In the event of an unfavourable balance of account on the other hand (which would arise mainly owing to the operations of an adverse balance of trade), the demand for sterling remittances in India would tend to depreciate the value of the rupee as measured in terms of gold or sterling. The Secretary of State would still require funds to meet home charges; but when the balance of accounts was already unfavourable to India, he could not very well obtain funds by the sale of Council Bills, because such sales would make that balance still more unfavourable, and so depreciate the rupee still further. When, therefore, the exchange was weak, the sale of Council Bills was greatly restricted; and when the Secretary of State could not get at least 15. 3 29/32d. per rupee, the sale of Council Bills was completely stopped. To meet his own expenditure he had to depend upon his cash balances, and if these proved to be inadequate, he obtained funds from the gold branch of the Paper Currency Reserve in London. This would naturally deplete the Paper Currency Reserve as a whole, but the gap thus caused was filled up by the transference of corresponding amounts of rupees to the Paper Currency In case these measures did not Reserve located in India. arrest the demand for sterling in India and the exchange remained weak, the Government of India offered Reverse Council Bills (which were the bills drawn by the Government of India on the Secretary of State) for sale at the rate of 1s. 3 29/32d. for a rupee (the gold export point) and withdrew the rupees, which it received for these bills, from circulation. Payments were made for these bills by the Secretary of State out of India's gold reserves located in London. The withdrawal of rupees or paper currency from circulation would bring about scarcity of money in India, with the result that prices would fall. This fall in prices would restore the balance of trade, the demand for sterling would cease and thereby the exchange value of the rupee would return to its original level. The withdrawal of currency from circulation after the sale of Reverse Council Bills in India was thus an essential condition for the maintenance of the exchange ratio at a fixed level.

Essential Conditions for the Working of the Gold Exchange Standard. It must have become obvious that the working of the gold exchange standard involved the maintenance of the exchange rate between the rupee (internal currency) and gold or sovereign (external currency) at a fixed level. In other words the depreciation of the rupee below 18. 3 20/32d. (the gold export point) or its appreciation above 1s. 4 1/32d. (the gold import point) would have, so long as the notification of 1893 remained in force, meant the breakdown of the system. But we have seen that the maintenance of the exchange ratio above 15. 3 29/32d. involved the maintenace of gold reserves, from which it follows that the sufficiency of these reserves to meet all possible contingencies was an essential condition for the working of the gold exchange standard. Again, as a favourable balance of account involved payments of corresponding amounts in rupees, or notes which were legally convertible into silver rupees, the maintenance of the ratio below 1s. 41/d. (the gold import point) rendered Government's command over large stocks of rupees necessary. But the Government could afford to issue rupees only so long as the gold value of the silver contained in the rupee was below or equal to its nominal exchange value, or in other words the price of silver was not above 43d. per ounce; for the moment the price of silver jumped above this point, the issue of rupees at 18. 4d. (which would be necessary so long as the Notification of 1803 remained in force) involved a loss to the Government which would be equal to the difference between the maximum of 43d. per ounce and the market price of silver bullion. If such a contingency ever arose—as it actually arose during the war from August 1917 onward—the breakdown of the exchange ratio of 1s. 4d. would be the result, and the new ratio would be determined by the price of silver. This would mean the breakdown of the gold exchange standard and the birth of a kind of bimetallism in which the ratio between gold and silver coins, or the rupee and the sovereign, would fluctuate according to fluctuations in the relative value of the two metals even though the mints may be closed to the free coinage of both.

Exchange Mechanism under the Gold Exchange Standard System. We have already examined the broad outlines of the governmental control of exchange and the methods which were employed for maintaining the exchange rate in the neighbourhood of 1s. 4d. We may now examine the working of that complicated system in some detail. To begin with it may be pointed out that remittances from India took place on account of (1) imports of merchandise, (2) imports of treasure, i.e., silver and gold bullion for private consumption, (3) home charges, i.e., the Secretary of State's expenses in connection with his own establishment, pensions, salaries, interest on public debt, store-purchase etc., and (4) private remittances from India to people or firms abroad. On the other hand funds would be received in India from abroad on account of (1) merchandise exports, (2) exports of silver and gold, and (3) private remittances This remittance account was settled directly or from abroad. indirectly through the agency of exchange banks. If the total remittances from abroad to India exceeded the remittances from India, the balance was either transferred to India by the exchange banks in the shape of sovereigns which were legal tender and, moreover, which could be changed into rupees in India, or with the balances these banks held in London and which were to be transferred to India they bought the Secretary of State's Council Drafts which entitled them to receive an equivalent amount of rupees in India from the Government. On

the other hand if the remittances to be sent from India exceeded the remittances from abroad, the balance would be left with the exchange banks in the form of rupees. In that event the banks bought Reverse Council Bills from the Government of India with these rupees which entitled them to receive an equivalent amount in sterling from the Secretary of State. In a nutshell, these remittances created a state of indebtedness both in India and, as always happens in international abroad. transactions, the debts on one side just cancelled debts on the other through the agency of exchange banks without the actual transference of funds, except in the event of heavier indebtedness on one side, in which case the currency of the debtor country had to be converted into the currency of the creditor country by the Government by the issue of, as the case may be, council bills or reverse councils.

The Chamberlain Commission: Its Findings and Recommendations. The currency system that came to be evolved after 1899 was, as we have seen, brought into being more by accident than design, so much so that it is doubtful if its advocates understood during the earlier stages its meaning and implications. And, furthermore, its various features and provisions involved a regular tug of war between the Government of India and the Secretary of State. Public opinion in the country was also highly critical of the manner in which the currency problem had been handled by the Government since the closing of the mints in 1893, so much so that it was sometimes asserted that the currency system of the country no longer enjoyed the confidence of the public. It was in these circumstances that a Royal Commission was appointed in April, 1913, under the Chairmanship of Mr. Austen Chamberlain to examine the working of the Currency system into which the Government of India had blundered, and to make recommendations with regard to future action and policy.

The Commission gave its unqualified blessings to the new system of currency in India which, they admitted, was "the result of a series of experiments" and not of a well thought out plan. They began by expressing the opinion that the crisis of 1007 and events during the post-crisis years had demonstrated the possibility of maintaining the rupee-sterling ratio at 1s. 4d. without having a gold currency actually in circulation in India. They contended that gold in circulation, far from benefiting India, may actually be harmful to her interests, and in support of this contention they put forth the argument that gold in circulation could not be depended upon for the support of exchange as little of this gold would be available for export purposes, while the policy of putting gold into circulation would, in the absence of profits from coinage, reduce the strength of the Gold Standard Reserve with all its adverse effects on exchange. They further opined in this connection that gold could be put into circulation at the expense of currency notes and not rupees which they considered highly undesirable. Moreover, they regarded gold in circulation in a country like India as wasteful because of the hoarding propensities of its people. And lastly they asserted that "India neither demands nor requires gold coins for currency"completely shutting their eyes to the fact that more than £00,000,000 in sovereigns had been put into circulation during the preceding twelve years, which was not far removed from the value of the new rupee coinage during the same period. As regards the establishment of a gold mint in India (which was advocated chiefly on the ground that it would encourage the imports of gold into Iudia and increase the amount of gold in circulation), the Commission expressed the opinion that India could enjoy all the advantages of a gold mint even under the gold exchange standard system if the Government would undertake to receive gold bullion in exchange for rupees or notes, thus rendering the opening of a gold mint unnecessary. But it seems they had not the courage to stand by their convictions, for we find them stating in the same breath that there can be no objection against a gold mint on principle "if Indian sentiment genuinely demanded it," provided that only sovereigns and half-sovereigns were minted. Be it noted, it was purely out

of regard for "Indian sentiment" that the Commission offered this blessing of gold mint to India. But we have seen that the opening of a gold mint would have been of no avail without a change of policy in regard to the sale of Council drafts; and the Commission must have realized that.

The Chamberlain Commission, realizing that the stability of the gold exchange standard rested on the amounts of gold in reserve, went on to recommend that no limitation should be imposed on these reserves and that all the profits from the coinage of rupees should be credited to the Gold Standard Reserve. They further recommended that larger amounts should be held in liquid form than had been the case hitherto, and that the amount held in the form of gold should be gradually increased to £15 million, and after that limit had been reached, one-half of the total reserve should be held in actual gold. They also recommended that the rupee branch of the Gold Standard Reserve held in India should be abolished, and the rupees held therein should be transferred to the Paper Currency Reserve, and an equivalent amount of gold should be transferred from the Paper Currency Reserve in London to the Gold Standard Reserve. And finally they recommended that the Gold Standard Reserve should be kept in London, and that gold from this reserve should be made available in Loudon in times of weak exchange by the Government undertaking to sell reverse council bills at the rate of 1s. 3 2 d per rupee whenever there was demand for such bills. They also made recommendations on the paper currency system with a view to making it more elastic, but these we propose to explain and discuss in detail when we deal with the paper currency system in the following chapter.

The Chamberlain Commission presented its report in February 1914, and while its recommendations were receiving the attention of the Government of India, the war broke out, and the Government "decided to postpone further action until the return of normal conditions." However, one important result of the report was that the principles underlying the working of

the gold exchange standard were more clearly understood, and the system came to be regarded not as a makeshift arrangement, as had been done hitherto, but as a permanent monetary structure.

CHAPTER XVIII

CURRENCY AND EXCHANGE-(Continued).

II. THE BREAK-DOWN OF THE EXCHANGE STANDARD

The Immediate Effect of War on Indian Currency and Exchange. From what we have said at various stages in the preceding chapter it must have become clear that the maintenance of the gold exchange standard involved the maintenance of the gold value of the rupee at a fixed level and the convertibility of the rupee into gold for purposes of international settlements at that level. But in actual practice we find that for foreign exchange purposes the rupee was convertible into sterling, so that the gold exchange standard could be maintained only so long as sterling itself was convertible into gold, and moreover gold could be freely exported from Britain for purposes of international settlements, or, in other words, London remained a free market for gold. Now we find that immediately after the outbreak of the world war, the exports of gold on private account from Britain were, for all practical purposes, completely prohibited, and the use of sovereigns and half-sovereigns for other than currency purposes was declared unlawful, though currency and bank-notes were still convertible into the gold coins of the realm. In these circumstances Britain ceased to have a gold standard for international purposes; and as the rupee was convertible into sterling only, we may say that India automatically ceased to have a gold exchange standard. In other words with the outbreak of the Great War the Indian currency system degenerated into the Sterling exchange standard system. Henceforth, the rupee could be converted only into sterling at 1s 4d., but not into gold. Under this arrangement the depreciation or appreciation of sterling in relation to gold (or dollar, which was still convertible into gold) was followed by a corresponding change in the gold value of the rupee.

Apart from this change in the currency basis, the war produced a feeling of insecurity in the country, which in turn dislocated trade and business. On top of this came the partial failure of the monsoon which played havoc with India's export trade. The results of this were that (1) exchange began to show signs of weakness, (1) savings bank deposits began to be withdrawn, (3) notes began to be presented for encashment, and (4) there was a general scramble for gold in the country. The Covernment of India took prompt and bold measures to counteract these tendencies. Firstly as regards exchange. though the Government at first hesitated to sell Reverse Councils, it soon realized the futility of this course, and began to support exchange by offering Reverse Councils, which were sold to the extent of £8,707,000 up to the end of January, 1915. As a result of the run on the savings banks, more than 8 crores of rupees (or nearly 33 per cent of the total deposits)were withdrawn during 1914-15, but the return of prosperity in the following year, the announcement of some fictitious victories in all the battlefields, and ('overnment's promptness in meeting its obligations in connection with these deposits, restored the confidence of the public to a certain extent. That this confidence was never fully restored is shown by the fact that in spite of an enormous increase in the volume of currency in active circulation during the war the savings bank deposits in 1018-10 were more than 25 per cent below the average in July, 1914. This lack of confidence also resulted in the encashment of currency notes to the tune of Rs. 10 crores between July, 1014 and March 1015; but once again Government's promptness in meeting its obligations and the announcement of some fresh victories saved the situation. And lastly, the demand for gold in return for currency notes resulted in the issue of £1,800,000 worth of gold during the first four days of August, 1914, and compelled the Government to suspend payments for notes in gold from August 5 onwards.

The Favourable Balance of Account: Its Immediate Consequences. The difficulties in connection with weak exchange and encashment of notes were hardly over when the

Government found itself on the horns of a new dilemma, which was created by the balance of account going heavily in India's favour during the years 1916-17 to 1918-19. To begin with, the demand for Indian raw materials and foodstuffs, and therefore the export trade in them, increased abnormally during these years on account of war, while imports into India declined sharply owing to lack of supplies and freight. This made the trade balance favourable to India to the average of nearly £60 millions a year during the three years under consideration. On top of this came Indian Government's expenditure on war on behalf of the British Government, which amounted to £240 millions.

We have seen that in normal times a favourable balance of account was liquidated by importing gold coins, or by the issue of silver rupees, or by the issue of paper currency against which a gold or rupee cover was provided. But we find that the Government was not in a position to avail itself of any of these devices to a great extent. During the war imports of gold into India amounted to only £26 millions, so that there still remained a balance of over £350 millions to be liquidated, which, in the absence of further gold imports, could be done only through the sale of council drafts. But we have seen that the sale of council drafts imposed an obligation on the Government of India to issue rupees or notes to the holders of drafts. In order to be able to make payments for these drafts, therefore, the Government began to mint rupees on an extensive scale.

Effects of Rise in the Price of Silver. But unfortunately for the Government this merry process of converting silver into rupees could not be continued for long owing to a sharp and substantial increase in the price of silver. This rise was due to the fact that while the demand for silver for currency and other purposes had increased to an enormous extent during the war, the supplies of the metal instead of keeping pace with the demand had actually declined by nearly 25 per cent during this period. The price of silver averaged 27¼d per ounce in 1915, increased to 37d, per ounce in

December, 1916, and stood at 43d. per ounce in August, 1917 -- the point at which the face or exchange value of the rupee (when the rate of exchange stood at 15, 4d,) would be exactly equal to the value of silver contained in it, or the point at which the Government would neither gain nor lose anything by minting the rupee. But this rise in the price of silver did not stop here, as we find that it touched the 50d, per ounce level early in 1919. It is obvious that from August, 1917 onwards even the sterling exchange standard ceased to exist; for the rise in the price of silver above 43d, per ounce was automatically followed by a corresponding rise in the exchange value of the rupee. If an attempt had been made to maintain the sterling exchange standard by maintaing the exchange value of the rupee at its old parity, the rupees would have immediately started going out of circulation, for it would have become profitable to melt them down and sell the metal in India or abroad. However, when the exchange value of the rupee was allowed to vary according to variations in the sterling or gold price of silver, the abandonment of exchange control implied that, for all practical purposes, the sterling exchange standard had given way to silver standard.

Measures taken by the Government. While the abovementioned changes were taking place in the currency and exchange system of India, the balance of account continued to pile up in India's favour. The Government was not slow to realize the futility of trying to maintain the pre-war system. In order to be able to meet the existing demand for currency and with a view to preventing this demand from increasing still further, the Government of India adopted the following measures:

(1) Limitation of Council Drafts Sales. The Secretary of State had, during the early stages, tried to liquidate the favourable balance (as he used to do in pre-war days) by offering to sell council drafts without limit; but when the Government of India could no longer mint new rupees and when in trying to meet its obligations in connection with council drafts it made serious inroads into the Paper Currency Reserve,

thus endangering the convertibility of notes, the Secretary of State was obliged to suspend the provision in regard to the sale of Council Drafts without limit and to limit these sales between 120 lakhs and 130 lakhs of rupees per week.

- (2) Control of Exports from India. Realizing that the demand for currency in India was due chiefly to the excess of exports over imports, and that the amounts offered by the Secretary of State were far too inadequate to pay for the favourable balance, the Government tried to kill the demand for currency by killing, as far as possible, India's export trade. With this end in view the sale of council drafts was restricted to a few banks and firms on the so-called "Approved List," who were, by these restrictive measures, compelled to confine their activities to the export of commodities needed by the Allies for the prosecution of war.
- (3) Raising the Exchange Rate. We have seen that the rise in the price of silver had rendered it impossible for the Government to offer rupees at the rate of 1s. 4d. without suffering a heavy loss. In these circumstances the Secretary of State had no option but to make the rate, at which he offered his drafts for sale, move according to the movements in the sterling price of silver. Thus on January 3, 1917 the exchange rate (telegraphic transfers) stood at 1s. 4½d.; on April 12, 1918 it reached 1s. 6d.; on September 15, 1919 it was recorded at 2s.; on December 12, 1919, it touched the 2s. 4d. level; and it was at this rate that council drafts were sold right up to the closing weeks of the year 1919.
- (4) Purchase of Silver. But inspite of the above-mentioned measures the demand for currency continued. As the supplies of silver were limited, the Government, in order to be able to acquire all available silver, prohibited on September 3, 1917, its import on private account into India as well as its export. Still the demand for rupees continued. The paper currency had, in order to meet the demand for currency, been strained to the breaking point, and its final collapse was well in sight, when the Government managed to replenish its depleted rupee resources

by purchasing 2,000,000 ounces of silver from the United States Government in April, 1918.

- (5) Economy of Silver. But before silver could be acquired from the United States, the Government was so desperately in need of the metal for meeting its currency obligations that it was compelled to economize its use by issuing 1 and 2½ rupee notes in December 1917, and by issuing two-anna, four-anna and eight-anna nickel coins in the place of the usual silver pieces.
- (6) Protection of Silver Coins. As the imports of silver on private account were prohibited, and as the melting down of rupees now no longer involved a loss, it was found necessary to keep the circulation of rupees intact by declaring unlawful the use of gold and silver coins for other than currency purposes. This was done on June 29, 1917.
- (7) I'se of (rold for Currency Purposes. The shortage of silver compelled the Government to acquire gold and to put it into circulation. An ordinance was issued on June 29, 1917, requiring all gold imported into India to be sold to the Government; and in August, 1918, a branch of the Royal Mint was opened at Bombay for the coinage of sovereigns. This branch of the Royal Mint was, however, closed in April, 1919.
- (S) Inflation of Paper Currency. But in spite of all the above-mentioned measures the demand for currency remained far from satisfied. This demand had to be satisfied somehow, and in desperation the Government restored to the use of the printing press without providing an adequate cover to insure the convertibility of notes. Same idea of the magnitude of note issue may be had from the fact that between March 31, 1914 and March 30, 1919, while gross note circulation increased by nearly 150 per cent. (from 60 crores to 153 crores) the metallic reserves decreased by more than 50 per cent. during the same period. In April, 1918, the inconvertibility of notes seemed imminent, but the position was saved by the timely purchase of silver from the United States. But it may be added that notes had become inconvertible in all but name; for we find that in its anxiety to avoid the payment of

coin for notes the Government had not only withdrawn the facilities for the encashment of notes at district treasuries, but had actually gone to the length of imposing restrictions on the amounts of rupees payable to the tenderers of notes even at the currency offices in various circles.

(9) Gifts and Loans. We have seen that the Government of India had spent over £ 240 millions during the war on behalf of the British Government, and that as this amount was to be paid back to India, it went a long way towards swelling India's favourable balance of account. As no means could be found of remitting this amount to India without involving the departure of gold from Britain (which the British Government was anxious to avoid at all cost), the Indian Government solved the difficulties of its masters in England by making a present of £ 100 million on behalf of the Indian people, thus rendering the transference of this amount to India unnecessary. And here in India this "gift" was collected in the shape of taxes and loans, so that it put the Government in a better position to meet the demand for currency.

Changes in the Gold Standard Reserve. The various changes that took place in the realm of currency and exchange in India and abroad during the war were not without their effects on the amount and composition of the Gold Standard In the first place, in accordance with the recommendations of the Chamberlain Commission, the rupee branch of that reserve was abolished in August, 1915. Secondly, it may be recalled that the Chamberlain Commission had recommended that a substantial portion of the reserve should be held in gold instead of securities; but we find that while the Gold Standard Reserve increased from nearly £ 221/2 millions in March, 1913 to nearly £371/2 millions in November, 1010, the gold reserves (which stood at £1,620,000 in March, 1913) instead of increasing more than proportionately actually dwindled down to the zero level. Practically the whole of reserve was invested in various British Dominion Government securities.

The Appointment of the Babington Smith Committee. The changes in the currency system of India, which we have examined in the preceding paragraphs, were not supposed to be permanent. A Committee of inquiry presided over by Mr. T. Babington Smith was appointed on May 30, 1919 "to examine the effect of war on the Indian exchange and currency system and practice, and upon the position of the Indian noterissine, and to consider whether, in the light of this experience and of possible furture variations in the price of silver any modification of system or practice may be required, to make recommendations as to such modifications, and generally as to the policy that should be pursued with a view to meeting the requirements of trade, to maintain a satisfactory circulation and to ensuring a stable gold exchange standard."

Recommendations of the Committee. The Committee after examining the working of the gold exchange standard in India came to the conclusion that while under this system it was possible to prevent a fall in the value of the rupee below 18 4d, no provision had been made against a rise in the value of the rupee above is 4d in the event of a rise in the price of silver above 43d per ounce. The Committee thought that the possibilities of a rise in the exchange value of the rupee above a certain point could be effectively checked only by fixing that value in such a manner as to retain the token character of the rupee in spite of all reasonable increases in the price of silver. Now the evidence put before them led them to the conclusion that, having regard to the demand for the metal and the conditions of supply, the price of silver was likely to remain high for a number of years. They estimated that if the price of silver was reckoned at the high figure of 62.9d (gold) per ounce, the price of silver contained in a rupee would work out at 1s 11.36d. These assumptions led the committee to the conclusion that the rupee could be reduced to the position of a token coin again only if the exchange value of the rupee was fixed at 2s. (gold); and so they recommended that the exchange rate should be fixed at that level.

It will be noticed that the Committee had recommended the fixing of the exchange value of the rupee in terms of gold and not sterling. The Committee gave preference to gold as against sterling for a number of reasons. In the first place they pointed out that sterling had already depreciated considerably in terms of gold and was likely to depreciate further, so that if the value of the rupee was fixed in relation to sterling, any further depreciation of the latter would inevitably be followed by a corresponding depreciation of the rupee also, which would be highly undesirable if the token character of the rupee was to be maintained. Again, they pointed out that as both the rupee and the sovereign were legal tender in India, it was imperative that the value of the rupee should be fixed in terms of gold; for if the value of the rupee was fixed in relation to sterling (whose value in terms of gold varied from time to time), constant variations in the relative value of the rupee and sovereign would inevitably render the circulation of the two coins in the country impossible. It was chiefly for these reasons that the Committee recommended the fixing of the exchange value of the rupee in relation to gold instead of sterling.

The Committee further recommended that immediately after the new exchange rate of Rs. 10 to the sovereign had been established, the Government should remove all the various war-time restrictions on the free imports and exports of gold and silver, and that branch of Royal Mint should be re-opened at Bombay for converting gold tendered by the public into sovereigns. Again, as a safeguard against a possible rise in the price of silver, they recommended that the Government should withdraw its obligation to give rupees for sovereigns. With regard to the Gold Standard Reserve, they expressed the opinion that it was not desirable to fix any limit as to its size, and recommended that a considerable proportion of it should be kept in the form of gold, a part of which, not exceeding one half, should be kept in India. The remainder of the reserve, they recommended, should be invested in securities issued by various Governments within the British Empire and maturing within twelve months. And lastly, they recommended that Council Drafts could be sold in excess of the Secretary of State's own requirements by competitive tender, and that in times of weak exchange the Government should immediately announce their willingness to sell Reverse Councils.

Government's Action on the Report. Most of the recommendations of the Committee were accepted by the Government, and on February 2, 1920, the Government issued a number of notifications giving effect to these recommendations. These notifications fixed the exchange value of the rupee at 2s (gold); announced that Council Drafts and telegraphic transfers would be offered by open tender every week, and that in future Reverse Councils would be offered for sale in times of weak exchange at a rate based on the cost of sending gold from India to London; withdrew the obligation on the part of the Government to give rupees in exchange for sovereigns and half-sovereigns; and removed restrictions on the imports of silver as well as on the inelting of gold and silver coins. An Act was also passed (Act xxxvi of 1920) which made the sovereign legal tender in India at Rs. 10.

Breakdown of the 2s. Ratio: Its Causes. Just after the Government had announced its intention of maintaining the value of the rupee at 2s. gold, a number of factors intervened and rendered the maintenance of that ratio impossible. To begin with, just on the day when the notification regarding the new exchange rate was issued, the dollar-sterling rate fell to the unprecedented low figure of 365 cents, which under the circumstance that the rupee (like the dollar) was now linked with gold, meant a corresponding rise in the value of the rupee as measured in terms of sterling. To make matters worse, the exchange market expected a further depreciation of sterling. This prospect made Indian exporters nervous; for the British importers of Indian produce had contracted to pay in sterling, and the depreciation of sterling would have meant fewer rupees for a given amount in sterling, which would have involved Indian exporters in losses. So naturally when these exporters expected a further rise in the sterling value of the rupec (or fall in the gold or dollar value of sterling) they

rushed to sell off their bills. The result of this sale of bills was that within a few days of the fixing of the ratio at 2s. (gold) the exchange rate jumped up to 2s. 11d. sterling.

There was another aspect to this fall in the rupee value of sterling: it meant that fewer rupees could now buy a given amount in sterling. Now, during the war foreign business concerns in India had accumulated vast amounts in profits. and immediately the exchange rate rose to 2s. 11d., they seized this opportunity of remitting those funds to England. Thus there arose a demand for sterling in India. But worse was yet to come. A study of the American and Indian index numbers for 1920 would show that both indicated an average rise of approximately 100 per cent. above the 1914 level, from which it follows that the old 15. 4d. (gold) rather than the new 2s. (gold) rate represented the natural ratio. The new unnatural ratio would inevitably penalize exports and encourage imports, and so through the operations of foreign trade would tend to revert to the normal or natural rate. To begin with, exports from India began to decline owing partly to the inability of foreigners to pay for them in the overvalued rupee and partly owing to the failure of monsoon. On the other hand imports jumped up with leaps and bounds owing to the fall in the price of foreign manufactures when measured in terms of rupees. The result was that between April 1920 and March 1921 imports exceeded exports by Rs. 80 crores in value. And this tendency continued till, as we shall see presently, the exchange rate swung in the opposite direction.

True to its word, the Government tried to meet the demand for sterling (occasioned by the adverse balance of trade) by offering Reverse Councils for sale with a view to preventing the exchange from falling. Some idea of the magnitude of the problem that faced the Government may be had from the fact that at one time a difference of as much as 4d. per rupee existed between the market rate and the rate at which Government was offering Reverse Councils. Of course in such circumstances the market rate was inoperative so that the entire burden of liquidating India's trade indebtedness fell upon the Government.

As even in India itself there was a premium on gold, (i.e. the rupee could no longer buy 11.30016 grains of fine gold, which was its gold value at 2s.) the Government began to sell gold in order to force down its price relatively to the rupee. In all nearly Rs. 60 crores worth of gold was sold before the futility of these sales was realized. In this way after exhausting its none too extensive sterling resources, which the sale of Reverse Councils entailed, as well as its gold reserves, and finding that the demand for sterling was still far from satisfied, the Government abandoned the idea of maintaining the exchange rate at 2s. gold, and began to stabilize it at 2s. sterling, which was at that time equivalent of nearly 1s. 7d. gold. But the demand for sterling was far too extensive to enable the Government to stabilize the exchange rate even at 2s. sterling.

In order to understand the causes of this failure to maintain the exchange value of the rupee, it is necessary to point out that during the year 1020 index numbers fell in the United Kingdom from 289 in January to 220 in December, while in the United States they fell from 233 to 179 during this period. Assuming that the 2s. ratio was a natural one in the beginning of 1920 (which, as we have seen, was by no means the case), it follows that the maintenance of the ratio at the new level would have been practicable only when the price level in India had fallen to the same extent as in the United States. This would have been the case only if the volume of currency had been contracted. In this connection it may be pointed out that the sale of Reverse Councils has for its object not so much the liquidation of India's adverse balance of account as to bring about a contraction of currency in the country by putting the proceeds of the sale of Reverse Council out of circulation. The contraction of currency brings about a fall in prices which stimulates exports and discourages imports, and thus ultimately restores the balance of trade. But we find that in 1920 this principle underlying the sale of Reverse Councils was ignored by the Government of India. "It did not withdraw notes from circulation to the full extent of the Reverse Councils sold : it practically went on issuing new currency simultaneously with the sale of Reverse Councils." The sale of Reverse Councils on this occasion amounted to £55,382,000, while against this the contraction of currency amounted to only Rs. 311/2 crores in all. The result of this policy was that the price level in India remained high relatively to the price level in Britain and the United States, so that the rupee-gold ratio and later on even the rupee-sterling ratio could not be maintained. Having thus failed to maintain the exchange value of the rupee the Government was compelled to suspend the sale of Reverse Councils in September, 1920, leaving the rupec to find its own exchange value through the operations of demand and supply. The result of this abandonment of exchange manipulations by the Government was that the exchange rate fell from is, ind, in September to 18. 51/2d, in December. It was in these peculiar circumstances that the attempt to re-establish the gold 'exchange standard in India after the war ended in a fiasco.

Further Fall in Exchange. The year 1921 did not bring any improvement in the situation. On the contrary, things became definitely worse. In spite of the fact that the Government had contracted the currency to the extent of nearly 311/2 crores during the year 1920-21, this contraction of currency had not proved to be adequate to lower the general price level in the country. On top of this came unsettled conditions in Europe and the impoverishment of India's European customers. The result was that India's unfavourable balance of trade during the year amounted to nearly Rs. 21 crores, which was an improvement upon the preceding year during which imports had exceeded exports by Rs. 79 crores. Anyhow, conditions were still favourable to a further fall in exchange. Nor was the course of relative prices any favourable to an improvement in the rate of exchange. During the year 1921 the general price level in the United States and Britain registered a decline of nearly 20 and 25 per cent, respectively, while on the other hand it declined by only about 10 per cent.

^{*} See H. L. Chablaui: Indian Currency, Banking and Exchange, p. 94.

in India during that year. The cumulative effect of all these adverse factors was that the exchange fell from 1s. 5¼d. (sterling) in January to 1s. 3¼d. in December.

Restoration of Favourable Trade Balance and Improvement in Exchange. The year 1922-23 marked the beginning of trade recovery. The monsoon in the year 1922 was satisfactory and harvests abundant, so that considerable surplus was available for export purposes. Some of the continental countries were still in an unsettled condition; but the United States, Britain, France and other countries were now experiencing a marked trade revival which created a demand for Indian produce in these countries. On the other hand, imports into India declined very considerably. The result was that exports exceeded imports by nearly Rs. 90 crores as against an unfavourable balance of nearly Rs. 21 crores during the preceding year. A part of the favourable balance during the year was liquidated by imports of nearly 50 crores worth of bullion into India. so that there still remained a balance of nearly Rs. 31 crores to be liquidated. The demand for rupees abroad to liquidate this favourable balance of trade went up, and consequently the value of the rupee as measured in terms of sterling, or the exchange rate, began to show an upward tendency as a result of this rise in demand, until in December, 1922, the exchange rate touched the 1s. 4d. level.

When the exchange was on its way to recovery, the Government adopted certain measures to help that recovery and to prevent a set back. It began by restoring confidence through balancing its budget. Secondly, it resorted to a more drastic currency deflation by selling securities in the Paper Currency Reserve and putting the currency that it received as the proceeds of those sales out of circulation. And lastly, notwithstanding the fact that the balance of account was in India's favour, the Secretary of State abstained from selling Council Bills even for his own requirements (which he met chiefly by borrowing in London and by realizing the amounts from the British Government which were due to India on

account of war expenditure), thus helping unsatisfied demand for rupees to push up the exchange rate.

The monsoon was again favourable in 1923, with the result that the balance of trade was favourable to India to the extent of about Rs. 145 crores in 1923-24. Nearly Rs. 49 crores worth of bullion was imported during the year, so that there still remained a net balance of nearly Rs. 96 crores to be liqudated. Again in 1924 the monsoon was excellent, and the favourable balance of trade reached the record level of Rs. 155 crores in the year 1924-25. The imports of bullion amounted to nearly Rs. 94 crores in value during the year, so that the net balance stood at nearly Rs. 61 crores. The result of these favourable trade balances was that the rupee-sterling exchange began to move up until it touched is, 6d. sterling, or about is, 4d. gold, in October, 1924. It is important to bear in mind that this rise in exchange was directly brought about by the deflation of currency, and as such we may say that it was the result of Government manipulation and was not due to the working of natural forces. However, the exchange was exhibiting a strong tendency towards moving further up when the Government decided to prevent its rise above 1s. 6d. sterling and to stabilize the exchange rate at that level. This the Government did by expanding currency. The Secretary of State had resumed the sale of Council Bills in 1923-24 on a small scale, but in order to meet the requirements of trade the Government had started purchasing sterling in India. This new method of transferring funds from London to India will be discussed later on; but at this stage it may be remarked that by purchasing sterling with rupees in India the Government could put rupees into circulation, or in other words it could expand currency, as effectively as by the sale of Council Bills. In 1924-25 this new method of sending remittances to the Secretary of State almost completely superseded the old method of selling Council Drafts in London, and during this year the sale of Council Drafts in London and the purchase of sterling in India involved over Rs. 55 crores. Again, as will be explained more fully in connection with paper currency, the Government expanded the note

issue to the extent of Rs. 8 crores against internal bills of exchange and Rs. 6 crores against British Government treasury bills in order to meet seasonal demand for currency.

The Attainment of the 1s. 6d. Gold Ratio. Notwithstanding the fact that currency was expanded considerably during 1925-26, the price level in the country continued to fall owing to the greater expansion of trade. Meanwhile, the gold (or dollar) value of sterling was going up, so that when the Government of India was trying to maintain the exchange at 1s. 6d. sterling, the rise in the gold value of sterling was automatically followed by a corresponding rise in the gold value of the rupee also. In April, 1925, England returned to the gold standard, which meant that the gold, as well as the sterling value of the rupee had risen to 1s. 6d.

As we have already remarked, this rise in the gold value of the rupee was directly due to the deflationary policy of the Government. Was it by design or accident that this high rate of exchange was attained? It is difficult to believe that those who were responsible for moulding the Government of India's currency policy were so ignorant of the trend of the dollar-sterling exchange that they could not visualize the possibilities of the appreciation of sterling. Such possibilities were always present: in fact the trend of the dollarsterling exchange itself during 1924-25 unmistakably suggested the probability of sterling reaching gold parity. When, therefore the Government allowed the value of the rupee to touch is. 6d. sterling, and when it tried to maintain that value in spite of a rapid rise in the gold value of sterling, we cannot say that the Government had no ulterior motive behind that policy, or that the 1s. 6d. gold ratio was not deliberately designed by it. And we shall see later on that it was designed directly in England's interests.

The Introduction of the Sterling Purchase System. We have seen how the Secretary of State used to obtain funds from India by the sale of Council Drafts, and how these sales of Council Drafts used to enable foreign importers of Indian commodities to make remittances to India without actually

exporting gold or sovereigns. In 1923 the system of purchase of sterling in India by public tender or private purchase was introduced, and, as we have pointed out above, the new method almost completely superseded the council draft sales system. The working of this method is very simple. The exchange banks and other firms have usually at their disposal funds in London in the event of India having a favourable balance of account, which they are anxious to transfer to India by converting it into rupees. The Government of India on the other hand has rupees in India which it is anxious to convert into sterling to provide funds to the Secretary of State in connection with the home charges. The Government of India purchased sterling in London through the Imperial Bank of India from exchange banks and others, so that these purchases put the Covernment in possession of sterling in London and exchange banks and others in possession of rupees in India.

The new system of sterling purchase had a number of advantages to recommend its general adoption and the supersession of the old system. To begin with, it will be noticed that the export of sterling bills originate in India, and as such it is in India that the Government can arrange to buy sterling more conveniently. Secondly, "the factors influencing the immediate course of exchange could be gauged more accurately and more promptly in India by regulating the purchase with reference to the varying conditions of the (Indian exchange) market, the operations of Government could be conducted so as to avoid fluctuations in rates with benefit both to trade and to the country generally."* It is desirable to point out in this connection that under the old system the Secretary of State enjoyed undue power in the exchange market, which he abused on certain occasions by selling council drafts at rates which adversely affected the Indian money market, and thereby subordinated the interests of India to his own requirements. Moreover, the various factors that influenced the immediate

^{*} Royal Currency Commission, 1926, Minutes of Evidence, Vol. II, P. 22, quoted by L. C. Jain in the Monetary Problems of India, P. 16.

course of exchange as well as the effects of those changes on the Indian money market could be studied on the spot and not from a distance of six thousand miles; and the purchase of sterling in India remedied these grave defects in the old system.

III. INTRODUCTION OF THE GOLD BULLION STANDARD.

The Appointment of the Hilton-Young Commission. We have seen that by the middle of 1925 the rupee had once again been permanently stabilized on a gold basis at 1s. 6d. But the country was far from satisfied with the new developments; and the manner in which India's gold and sterling resources had been squandered without even the consolation of attaining their object had aroused a storm of indignation, and naturally made the country apprehensive in regard to future developments. As a result of this agitation a Royal Commission was appointed on August 25, 1925, under the Chairmanship of Commander Edward Hilton-Young to examine and report on the Indian exchange and currency system and practice in existence at the time, to consider if any modification in that system was desirable in the interests of India, and to make recommendations.

Defects in the Existing System. The Commission subjected the existing currency and exchange system to a thorough examination and summarized its main defects as follows:

- "(1) The system is far from simple, and the basis of the stability of the rupee is not readily intelligible to the uninstructed public. The currency consists of two tokens (i.e. rupees and currency notes) in circulation, with the unnecessary excresence of a third full-value coin (the sovereign) which does not circulate at all. One form of token currency (into which there is an unlimited obligation to convert the other) is highly expensive, and is liable to vanish if the price of silver rises above a certain level.
- "(2) There is a cumbrous duplication of reserves, with an antiquated, and dangerous, division of responsibility for the control of credit and currency policy.

- "(3) The system does not secure the automatic expansion and contraction of currency. Such movements are too wholly dependent on the will of the currency authority.
- "(4) The system is inelastic. The utility of the provision for elasticity made on the recommendation of the Babington Smith Committee is affected by the methods of financing Indian trade."*

In explanation of these findings of the Hilton-Young Commission it may be pointed out that the first fundamental condition for the automatic working of the gold exchange standard is the expansion and contraction of currency exactly in proportion to the amounts of Council Drafts and Reverse Councils sold by the Government. This expansion and contraction of currency is in turn necessary for the automatic stabilization of exchange immediately through a rise and fall in the internal price level, and ultimately through the expansion and contraction of imports and exports as a result of changes in the internal price level. But we find that in India the Government was under no statutory obligation to expand and contract currency exactly according to the sale of Council Drafts and Reverse Councils. Often instead of meeting its obligations in connection with Council Drafts by issuing extra currency it resorted to making payments from treasury balances, while the sums received for Reverse Councils were, as during the crisis 1907-08, never taken out of circulation in their entirety. As regards the unnecessary duplication of reserves, it may be pointed out that the ultimate object of the maintenance of the gold standard and paper currency reserves was the maintenance of the external value of Indian currency, so that their separate existence could not be justified on any ground, except perhaps for reasons of book-keeping. Again, these two currency reserves were kept quite apart from, and had no connection whatever with, the banking reserves upon which banking credit was based. As pointed out by the Commission, "The Government controls the currency. The credit situation is controlled, as far as it

^{*} See Report, Para 21.

is controlled at all, by the Imperial Bank. With divided control, there is likelihood of divided counsels and failure to co-ordinate."

With regard to lack of elasticity in the currency system. it may be pointed out at the outset that the demand for currency in every country varies according to the extent of trading operations at various times, and that unless the volume of currency is expanded in relation to the expansion of trading operations, the increase in demand for currency, its supply remaining unaltered, leads to increase in discount rates with all its undesirable effects on the trade and commerce of the country. But it is by no means necessary that in order to meet the increased requirements of trade the metallic or paper currency should be expanded: the requirements of trade are equally well served by the expansion of cheque currency through the inflation of credit. But in a country like India, where banking habit and credit organization are not adequately developed, the expansion of credit cannot serve as a substitute for metallic or paper currency in busy times, such as the harvesting seasons It is thus imperative that somehow additional currency should be made available in busy seasons. will be shown in connection with paper currency that the Act of 1923 had authorized the Government to grant loans up to Rs. 12 crores to the Imperial Bank against trade bills in times of increased demand for currency, provided the interest ratetouched a certain level; which shows that currency could be expanded only to the extent of Rs. 12 crores and no more, and even that on the condition that the rate of interest touched the high level of 8 per cent, and that such issues could take place only against self-liquidating trade bills which are not commonly drawn in India. "Trade in India is generally financed by means of cash credits or promissory notes-not hundis or bills."

It was on account of these drawbacks that the Hilton-Young Commission condemned the currency system that

^{*} L. C. Jain: The Monetary Problems of India, P. 24.

was prevailing in India at the time of their inquiry. They thought that the evolution of Indian economic system had "reached the stage when her currency can and should be placed upon a more simple, certain and stable basis."

Some Alternative Proposals. But which system was likely to provide that "more simple, certain and stable basis" for India's currency without unduly disturbing the existing currency and credit organizations in Iudia and abroad? The Commission first examined the possibilities of the sterling exchange standard and rejected the system on the grounds that it could not be maintained (as had happened during the war) in the event of a rise in the price of silver beyond a certain level, and that the gold value and consequently the purchasing power of the rupee would be liable to constant fluctuations according to changes in the value of sterling in the event the latter was ever forced off gold, which would be highly detrimental to India's economic well-being. Then they proceeded to examine the feasibility of perfecting the gold exchange standard, and came to the conclusion that the continuance of the system was undesirable because, in spite of all the various improvements that human ingenuity could devise, the silver rupee could never be kept in circulation after the price of silver had exceeded a certain point, and because the system did not inspire the confidence of the public owing to the absence of visible solid backing, which could be provided only by ensuring the convertibility of the rupee tokens and notes into gold for internal purposes, which was not possible under the gold exchange standard system. The Commission next examined the possibility of adopting the gold standard with a gold currency, but rejected the scheme on the grounds that the demand for gold in India for currency purposes (over and above the normal demand for the metal in the country) would lead to the contraction of credit and therefore to a fall in gold prices all over the world, which would be disastrous to industry and trade in every country, including India; that in view of such undesirable developments the United States, (which had the largest gold reserves at the time) would not be willing to supply gold to India to enable it to adopt the gold standard more particularly as the adoption of gold standard in India would do irreparable damage to her silver market; that the adoption of the gold standard in India would bring down the price of silver with a crash so that China (a silver standard country) would also be compelled to follow suit which will have further reaction upon prices in gold countries; that a fall in the price of silver would bring hardships to the poorer classes in India who had stored their purchasing power in their silver hoards. Obviously enough there was nothing new in these arguments which were a mere rehash of the arguments put forth against the adoption of the gold standard in India by the Chamberlain Commission and various lesser luminaries in the world of Indian currency and finance.

The Gold Bullion Standard. After turning down these various proposals the Commission proceeded to explain that the adoption of gold standard need not be followed by actually putting gold currency into circulation, so long as the media of exchange were convertible into gold bullion both for internal and external purposes; and on this principle they based the currency system which they recommended for India, and which has come to be known as the Gold Bullion Standard. The scheme proposed by the Commission aimed at stabilizing the gold value of the rupee by making it (as well as currency notes) convertible into gold for all purposes by imposing a statutory obligation to that effect upon the currency authority. With this end in view the Commission proposed that both silver rupees and currency notes should continue to be unlimited legal tender and that it should be obligatory upon the currency authority to convert rupees and notes into gold at a fixed rate and when at least 400 ounces of the metal were demanded. The Commission further gave it as their opinion that as the currency would be readily convertible into gold, the circulation of a gold coin as an additional unlimited legal tender, far from performing any useful function in the working of the proposed currency system, would actually

hamper its smooth working inasmuch as it would bring about a reduction of gold reserves and thereby weaken the credit structure. They, therefore, proposed that the sovereign should cease to be legal tender.

In support of this scheme they argued that as the currency authority would be under a statutory obligation to give gold bars at a fixed rate in exchange for silver rupees and currency notes not only for export but also for internal consumption, the system would fulfil all the requirements of a full-fledged gold standard. In making this assertion they had obviously in their mind the system current in Britain at the time, while they forgot to take into account the fact that in England the Act of 1925, though closing the mints to the free coinage of gold, had not deprived the sovereign of its legal tender quality. nor were silver coins declared unlimited legal tender in that country. However, the Commission thought that the proposed system would immediately introduce a full-fledged gold standard without the necessity of having recourse to transitional arrangements proposed by other schemes. Besides, as the scheme required the gradual strengthening of gold reserves without bringing about a sudden demand for gold with all its adverse effects on world trade, it rendered the introduction of gold currency possible, if it was ever so desired, at some future date, though the Commission opined that it would not be in India's interests ever to have gold currency in circulation. The gold currency "must not circulate at first and need not circulate The new system, according to the Commission, was "an absolute gold standard" and not an exchange standard, because the currency authority was to be under a statutory obligation to give gold bars in exchange for silver rupees and currency notes not only for export purposes but for all pur-"Nevertheless the compensatory mechanism of the poses. exchanges is preserved, because gold bars are not currency." The rupee and notes representing the proceeds of the sale of gold bars would be taken out of circulation and thereby currency would be contracted as a result of those sales, while

it would be expanded when rupees or notes were issued in exchange for gold bars. Thus, the Commission maintained, not only the compensatory mechanism of the exchanges would be preserved, but also the whole currency system would thereby become elastic.

The selling rates for gold. But in selling gold, the fact that there is a large demand for the metal for non-monetary purposes was to be taken into account. "It is essential, therefore, that the conditions which are to govern the sale of gold by the currency authority should be so framed as to free it in normal circumstances from the task of supplying gold for non-monetary purposes. In order to achieve this object we propose to fix the selling prices of gold at rates which will enable the bank to replenish its stocks of gold without loss by importation from London. Thus when the exchange is at the upper gold point the selling price for delivery at Bombay will be the par value, i.e. Rs. 21-3-10 per tola. When exchange is below this point, the bank will be required to sell gold for delivery in London or Bombay at the option of the purchaser at certain notified prices. prices will be determined by the cost at which gold could be respectively purchased in London or laid down in Bombay from London when exchange is at the lower gold point. The option to the purchaser on the other hand to buy gold for delivery in London at the prices determined leaves the margin between the upper and lower gold points of the exchange as narrow as it would be, having regard to the cost of moving gold to and from its most convenient gold centre."*

Issue of Gold Savings Certificates. But it will be noticed that the currency authority was to be under no obligation to sell less than 400 ounces of gold. Such enormous quantities of the metal would be purchased not by ordinary individuals but either by banks for export purposes or by bullion dealers. In order to win the confidence of the general public in the value and stability of the currency of the country (which the Commission believed could be inspired only by

^{*} See Report, Para 65.

making its gold basis more apparent to the uninitiated in the mysteries of currency organization), it was suggested that savings certificates should be issued which should be redeemable in three or five years in legal tender money or in gold at the option of the holder, and which should yield an attractive rate of interest. Apart from demonstrating the gold basis of the currency, these savings certificates were also calculated to mobilize India's famous hoards of precious metals, for, it was believed, immediately the hoarder was assured that the savings certificates not only promised to bring him back his savings in solid gold but also something over and above that in the shape of interest, he would give up the risky and unprofitable habit of hoarding away his savings.

Convertibility of notes into silver rupees. The Commission further recommended that new notes should be issued which should be convertible into gold bars only and not into silver rupees. On the other hand old currency notes, so long as they remained in circulation, were to be convertible into rupees as before. But while the legal obligation to convert notes into rupees was to be withdrawn, rupees were to be made as freely available to the public as possible. Again, it was suggested in this connection that one-rupee notes should be reintroduced and that the notes of higher denominations should be convertible into notes of smaller denominations or silver runees at the option of the currency authority. These changes, the Commission thought, would reduce the demand for silver rupees and necessitate the strengthening of gold reserves. They, therefore, recommended that the coinage of rupees should be stopped so as to reduce the circulation of rupees to the amount required by the people for small change.

The Unification of Reserves and their Composition. It has already been explained that both the Paper Currency and Gold Standard reserves ultimately served one purpose, viz., the stabilization of the value of currency. The Commission, therefore, recommended that these reserves should be unified into one reserve. The proportions and composition of this unified reserve were to be fixed by statute. In this connection

they recommended that gold and gold securities should not form less than 40 per cent. of the Reserve, which may be increased to 50 or 60 per cent. The holding of gold (as distinguished from gold securities) was to be increased to 40 per cent, within five years of the adoption of the scheme, and to 25 per cent. within ten years. "During this period no favourable opportunity of fortifying the gold holding in the Reserve should be allowed to escape." Of this gold holding at least one-half was to be held in India. The Commission further recommended that as the demand for rupees was likely to be greatly reduced in consequence of the various measures they had suggested. the silver holding in the reserve should be reduced from 85 crores to 25 crores within a period of ten years. balance of the reserve was to be held in the Government of India rupee securities and self-liquidating trade bills. Government of India rupee securities were to form not more than 25 per cent, of the reserve or Rs. 50 crores, whichever was less, and the created securities were to be replaced by marketable securities within ten years.

Checks on the Purchase of Gold for Non-monetary Purposes. The recommendation of the Commission in regard to the statutory obligation of the currency authority to sell gold for rupees and currency notes (so long as at least 400 ounces of the metal were demanded) would have made bullion dealers in the country dependent upon the currency authority for the supply of gold for non-monetary purposes, and thus weakened the gold reserves to the detriment of the stability of the currency. The Commission apprehending these developments made certain recommendations which, from the point of view of convertibility, reduced their gold bullion standard to the level of gold exchange standard in all but name. In a nut-shell, the Commission tried to circumvent the difficulties associated with the unrestricted sales of gold by recommending that the currency authority (the Reserve Bank) should charge for gold for non-monetary purposes the par rate and in addition to that double the ordinary shipping, interest and insurance charges. The Commission thought that this

prohibitive rate would effectively check the demand for gold for non-monetary purposes from the Reserve Bank, thus enabling it to conserve its stocks of gold for purely monetary purposes. In the face of these restrictions the whole idea of inspiring confidence in the currency of the country by putting it on the so-called "more tangible basis of gold" falls to the ground, and the Commission's previous recommendation in regard to the sale of gold by the currency authority to all and sundry (so long as at least 400 ounces were demanded) ceases to have any meaning.

The Establishment of a Reserve Bank and the Unification of Currency and Credit Control. It will be shown in the next chapter that the Imperial Bank of India was supposed to control the credit machinery of the country, though in actual practice that control did not go very far. But as, on the other hand, the control of currency was vested in the Covernment of India, it was impossible to harmonize the credit and currency policy so long as the unification of control was not effected. Seeing that the ultimate basis of all banking credit is currency, and that the requirements of a country in the matter of currency and credit fluctuate from time to time according to the extent of trading operations, the unification of currency and credit control is necessary in the interests of commerce as well as of the stability of the value of currency itself. In every advanced country in the world the control of both currency and credit is entrusted to a single authority—a central bank of issue-which controls both the currency and banking reserves and expands and contracts currency and credit according to the requirements of trade. The adverse consequences of the division of control in India between the Government and the Imperial Bank were clearly perceived by the Hilton-Young Commission, who, in order to bring about the desired unification, recommended that the control of both should be entrusted to a central bank of issue. to be known as the "Reserve Bank of India." This new bank was to be entrusted with all the various functions in connection with the management of currency and banking reserves, note issue, credit control and others that are performed by central banking institutions in other countries.

Stabilization of the Rupee. We have already seen that in April, 1925, Britain had returned to the gold standard. We have also seen how the Government of India deliberately pushed up the value of the rupec to rs. 6d. gold by manipulating currency and exchange. By the time, therefore, the Hilton-Young Commission started its investigations, the 15. 6d. (gold) ratio had become an accomplished fact. But as this new ratio had not vet been fixed by statute, it fell to the lot of the Hilton-Young Commission to recommend it for legal recognition. In support of this recommendation the Commission argued that the 1s. 6d. (gold) ratio had already been stabilized since the middle of 1925, and that prices in India had already adjusted themselves at a level as to justify the adoption and maintenance of the new ratio. Commission tried to fortify this conclusion by asserting that the new ratio had not affected imports and exports adversely, which in the opinion of the Commission was a sure indication that the adjustment between the external and internal prices had already taken place, and which justified the maintenance of the new ratio. The Commission further tried to justify the 15. 6d. ratio by asserting that wages in the country had also been adjusted in accordance with the new level of prices and rate of exchange.

The Commission next considered the effect of the new ratio on contracts, and came to the conclusion that no real hardships would result in consequence of its adoption. They did not deny the fact that most of the land revenue settlements current at the time of their inquiry had been effected at the time of 1s. 4d. exchange; but as a heavy rise in prices had taken place, the burden of land revenue as measured in terms of produce had not increased as a result of higher exchange rate, so that the new 1s. 6d. ratio did not actually entail even the slightest injustice. The case of other contracts was somewhat different. The Commission pointed out that exchange had been exhibiting

violent fluctuations since the year 1917, and they put forth the conjecture that most of the contracts must have been entered into during that period of fluctuating exchange. In view of these disturbances it would not be possible to fix a rate of exchange that would do absolute justice to both debtor and creditor. "We conclude, therefore, that from the point of view of contracts, as well as that of prices and wages, the least disturbance will be caused, and the least injury will be done to all the interests concerned, by adhering to the de facto rate."*

Commission's Arguments against 1s. 4d. Ratio. main argument in favour of 1s. 4d. ratio was that it was a natural ratio; but the Commission refuted this argument by asserting that "fluctuations in exchange are produced by the mutual interaction of internal and external prices and as the level of internal prices is determined mainly by the volume of internal currency, the only rate that can be regarded as natural is the figure at which these prices are in adjustment with the existing volume of currency and are also in equilibrium with external prices. From this point of view 1s. 6d. appears to be clearly the natural rate under present con-The term, however, appears to be loosely used to denote the rate which would result if no attempt were made either by statutory enactment or executive action to anchor the rupee to a particular point. If such a policy were adopted, there can be no doubt that in a country like India where there are wide seasonal fluctuations of trade, there would be similarly extensive fluctuations in the rate of exchange amidst which it would be impossible to distinguish any particular rate as natural."

The Commission next proceeded to examine the argument that the 1s. 6d. rate had been established through Government manipulation and that as such the reversion to the old ratio of 1s. 4d. would be less harmful to the country than the maintenance of the higher ratio. In refuting this contention they asserted that the 1s. 6d. rate was an accomplished fact,

^{*} See Report, Para 196.

and when prices and other factors were in adjustment with those in the world at large on the basis of the new ratio, the question of the means by which that rate came into existence had no bearing on the extent or violence of the economic disturbances which would be caused by changing the rate.

The opponents of the 1s. 6d, rate had shown their preference for the old rate on the ground that the new rate would necessitate the employment of larger amounts of gold for the maintenance of the gold standard, so that in the event of an adverse balance of trade it would be easier to maintain the 1s. 4d. rate than the 1s. 6d. rate. The Commission answered this objection by stating that as the lower rate would involve the expansion of currency exactly to the extent of the depreciation of the rupee (as measured in terms of gold), it would not be possible to reduce the gold reserves in the event the country reverted to the old ratio. The maintenance of the ratio in the event of an adverse balance of trade, they explained, depended upon the ability of the currency authority to contract the volume of circulation so as to bring about a fall in prices sufficiently pronounced to restore the balance of trade; so that if gold and gold security reserves were adequate to meet the demands of the exchange market just to such an extent as to bring about the contraction of currency to the desired level, it would not be more difficult for the currency authority to maintain the higher ratio.

Again, it was argued that in the event of a fall in world prices the 1s. 6d. ratio would accentuate the fall of prices in India. The Commission, on the other hand, argued that a fall in world prices would be in evidence only in the event of gold production in the world not keeping pace with the demand, and even then the fall in prices would not be sudden and sharp but would be slow and gradual. In that case India would suffer in common with the rest of the world even if she reverted to the 1s 4d ratio.

The opponents of the rs. 6d. ratio further contended that the new rate would reduce the price of precious metals, as measured in terms of rupees, which would increase the demand for these metals still further, and which was not desirable from the point of view of the economic development of the country. Against this contention the Commission put forward the argument that the lowering of the ratio to 1s. 4d. would, while increasing the price of gold as measured in terms of rupees, also in the long run bring about a corresponding increase in the general price level, so that the relative value of gold and commodities would remain the same. From this the Commission drew the inevitable conclusion that the raising of the exchange ratio to 1s. 6d. would not stimulate the demand for precious metals, except during the period of transition when commodity prices adjusted themselves to the higher gold value of the rupee.

The Commission further re-inforced their arguments against the 1s. 4d. ratio by saying that its adoption would raise prices by 12½ per cent. which would adversely affect the consumers in general and people with fixed incomes (including the labouring classes) in particular. They further argued that the sterling expenditure of the Government of India would increase by about Rs. 3 crores a year. The railway expenditure would also increase by 12½ per cent., which would necessitate a corresponding increase in railways rates and fares. Furthermore, the stores purchased abroad would cost more in rupees. Thus, taken as a whole, governmental expenditure would go up, which would involve a corresponding increase in eaxation if the budget was to be balanced. An unbalanced budget, on the other hand, would lower the credit of India abroad and damage her borrowing power.

Minority's Minutes of Dissent. In order to have an idea of the real value of the various assertions upon which the Hilton-Young Commission based its recommendation in regard to the 1s. 6d. ratio, we might also consider the various counter arguments which were put forward by Sir Purushotamdas Thakurdas in his Minute of Dissent. He began by pointing out that the Government had deliberately raised the exchange to 1s. 6d. gold by manipulating the currency. In September, 1924, the rate had touched 1s. 4d. gold, but the Government

allowed the rupee to appreciate still further by hugging the 18. 6d. sterling rate until sterling reached its gold parity. Sir Purushotamdas next proceeded to produce facts and figures to disprove the Commission's assertion that at the 1s 6d ratio prices in India had been adjusted to the world prices. Similarly, he disproved by means of facts and figures the Commission's contention that agricultural, industrial and clerical wages had been adjusted to the new ratio. According to him, until prices and wages in the country had been adjusted, the new ratio would handican Indian manufacturers and producers to the extent of the appreciation of the rupee (121/2 per cent) and so make it impossible for them to compete against their foreign rivals both in India and abroad. was equally resourceful in combating the Commission's assertions in regard to contracts. "A change to 1s 6d hits the large bulk of the debtor class to the benefit of the creditor class. I cannot conceive of any valid or moral reason for a step calculated to give the latter an unearned increment at the expense of the former. In India, perhaps more than anywhere else, the debtor class is the largest and the neediest. Throughout the course of our enquiries I have not heard of a single argument, which I can reasonably accept as sound, even pointing to the inevitability, to say nothing of the justifiability, of imposing an additional burden on a class already overburdened."* He thought that the adverse effects of the 15. 4d. ratio on the finances of the Government had been grossly exaggerated by the Commission. The 1s. 4d. ratio would have involved an additional provision of nearly Rs. 3 crores for meeting sterling liabilities, but he estimated that the 1s 4d ratio would increase revenue from customs duties alone by Rs. 2.62 crores. Apart from that, income tax would show substantially larger returns owing to the avoidance of disturbances to industry associated with the fixation of the ratio at 18 6d. As regards the supposed sufferings of the various classes with fixed money income as a result of rise in prices

^{*} Sir Purshotaindas Thakurdas in his Minute of Dissent.

consequent upon the adoption of the 1s 4d ratio, Sir Purushotamdas contended that as the adjustment of prices to the higher ratio had not yet taken place, the reversion to the 1s 4d ratio would bring about hardships but to few. But even assuming for the sake of argument that these classes with fixed money incomes would be adversely affected by the 1s. 4d. ratio, it cannot be denied that the classes actually engaged in production would gain. According to him "if 79 per cent. of the people of India subsist on agriculture, it is difficult to understand the concentration of my colleagues on the interests of the other 21 per cent. who live on the production of this class."

Advantages of the 1s. 6d. ratio to Britain. Let us now see the other side of the picture. Were the English as a race disinterested spectators in this game of ratio fixation? It is to be remembered that since the war most of the old customers of Britain had closed their doors to British goods by setting up high tariff walls, so that British industries were desperately in need of markets for their products. The door in India was still wide open, but even here the expansion of manufacturing activities, more particularly in the cotton industry, had greatly reduced the scope for the products of Lancashire. The capital expenditure of most of the industrial establishments in India having been undertaken in the days of the 1s 4d ratio, they could not be in a position to compete against their British rivals, even after prices and wages had been completely adjusted to the new ratio, without drastic decapitalization which no joint stock concern really relishes. The ratio could thus be relied upon to open the "open door" still wider. Then there are thousands of commercial, judustrial, banking, insurance, shipping, mining, plantation and other concerns which are carrying on business with British capital in India. The profits of these concerns have to be transferred to Britain; and as under a higher ratio sterling would be worth a smaller number of rupees than under a lower ratio, a higher ratio (which would augment their profits as measured in terms of sterling) would always be welcomed with open arms by these

concerns. And lastly, but of the greatest importance of all, there is the grand army of Government's British officials whose salaries are fixed by statute. A higher exchange rate would suit them splendidly, for it would mean smaller expenditure in India owing to fall in the price level consequent upon higher exchange rate, which in turn would mean larger savings in rupees. These larger savings would buy still larger amounts of sterling owing to the higher exchange rate. Thus the is 6d rate opened up for these officials two very fertile means of augmenting their savings. Obviously enough the 121/2 per cent fall in prices in India would bring about a corresponding increase in their savings in runees, while the conversion of those runees into sterling would mean another bounty of 121/2 per cent. Possibly, rather probably, the onward march of the rupee beyond is 4d gold during 1924-25 had its causes embedded in this circumstance. However, the increase in exports to India, the increase in the profits of commercial and other concerns. and the bounty on the savings of Government officials would altogether make a difference of tens of millions of pounds to Britain. It is a pity the Hilton Young Commission did not concern themselves with this by-product of the 18 6d ratio. More likely than not, they were inspired by it.

Government's action on the Commission's Report. The recommendations of the Hilton-Young Commission were accepted by the Government of India, and three Bills embodying these recommendations were introduced in the Legislative Assembly on January 25, 1927. These were (1) the Currency Bill to amend the Coinage Act of 1906 and the Paper Currency Act of 1923, and to lay certain obligations upon the Government in regard to the purchase of gold and the sale of gold and the sale of gold exchange; (2) the Bill to establish a Reserve Bank in India; and (3) the Bill to amend the Imperial Bank of India Act of 1920.

The fate of the two last-named Bills will be considered in connection with the Money Market organization in the next chapter. At this stage it is enough to state that on account of various reasons the Legislative Assembly threw out the

Reserve Bank Bill; so that the third bill was not proceeded with. The Bill to amend the coinage Act of 1906 and the Paper Currency Act of 1923, however, was passed by a narrow majority with amendments of none too consequential character, and the new Act came into operation from April 1, 1927.

This Act gave legal recognition to the de facto is 6d ratio that had been in operation since April, 1925, by providing that Government would purchase gold at Rs. 21-3-10 per tola in the form of bars containing not less than 40 tolas, and would sell gold or, at the option of the Government, sterling for immediate delivery in London at the same price after allowing for the cost of transport from Bombay to London subject to the proviso that not less than 400 ounces of gold or sterling worth that amount of gold were demanded. The rate of 1s. 53 d. was notified as the Government's selling rate for sterling to meet these obligations. The Act also provided that sovereigns and half-sovereigns were to cease to be legal tender in India, but it imposed an obligation on the Government of India to receive these coins at its currency offices and treasuries at their bullion value, which worked out at Rs. 13-3-10 per sovereign.

The Automatic Character of the New System. position created by the Act of 1927 amounted to this. rupee and half-tupee coins and currency notes remained unlimited legal tender as before, while the sovereign and halfsovereign ceased to be legal tender, though the Government undertook to convert them into rupees at the rate of Rs. 13-3-10 per sovereign. Thus the parity of exchange was fixed at 8.47512 grains of fine gold per rupee. The Government was also under a statutory obligation to buy and sell gold at a fixed rate subject to certain conditions. These buying and selling obligation of the Government in regard to gold would, at any rate in theory, make the new system as automatic in its working as a full-fledged gold standard. In times of an adverse balance of account the Currency authority would have to sell gold or sterling in exchange for rupees and notes, so that the depletion of gold reserves would be followed by a corresponding contraction in the volume of currency in circulation. This contraction of currency would react upon prices which in turn would react upon exports and imports, thus restoring the balance of account. On the other hand the favourable balance of account would lead to the issue of fresh currency in India against the delivery of gold in India or London (representing the surplus balance). But it may be objected that as the Government of India was under no statutory obligation to contract and expand currency exactly according to the outflow and inflow of gold, the system could not be automatic in its working. There was certainly no statutory obligation to that effect, but the fact that the Government was bound to buy and sell gold at a fixed rate was an ample safeguard against such contingencies. The maintenance of the ratio itself, as in the case of the gold exchange standard system, would depend upon the expansion and contraction of currency, so that the buying and selling of gold at a fixed rate could not be indulged in for long by the Covernment unless these buying and selling operations were followed by the expansion and contraction of currency more or less to the corresponding extent.

Currency and Exchange during 1927-31. The behaviour of exchange from 1027 onwards and the adoption of some extreme measures by the currency authority to maintain the is 6d ratio show that the allegation that price level in the country had not been adjusted to the new ratio was not altogether without foundation. The exchange showed signs of weakness in the early months of 1927, and the Government tried to arrest this tendency by declining to lend funds to the Imperial Bank of India against trade bills at the stipulated rate of interest. Not being content with this the Government actually contracted currency. But the exchange continued to be markedly weak during the next four years notwithstanding the fact that the rate of interest at which Government was prepared to issue emergency currency to the Imperial Bank of India was increased to 8 per cent., and currency was contracted in a drastic manner. In all, apart from silver currency for

which no data are available, "the net contraction of note currency during the quinquennium (1926-27 to 1930-31) was no less than Rs. 102.5 crores."*

IV.—The re-adoption of the Sterling Exchange Standard.

The Currency Crisis of 1931 and linking of the Rupee to Sterling. The difficulties of the Government during the later years were due in part to fall in prices and trade depression, so that not unnaturally the confusion grew worse confounded as the depression manifested itself with greater intensity. It was not long before the exchange touched the lower gold point, and to prevent the rupee from breaking away from its moorings altogether the Government had to sell more than 10 million sterling in the months of August and September, 1931. Everything pointed to the conclusion that a first class currency crisis was imminent; but apparently the Government was not yet out of luck's way. September 21, Britain went off the Gold Standard, and the ensuing events in India helped, or rather were designed to help, the Government to retrieve its fortunes. When sterling was no more convertible into gold, there were just three possible alternatives for the Government of India in regard to its currency policy. Firstly it could try to maintain the so-called gold bullion standard regardless of the fate of sterling. This would have involved the maintenance of the value of the rupee at 15 6d, which the Government had been able to do but with the greatest difficulty during the four preceding years, and which it would have found all the more difficult, if not impossible, to do in the future in view of the fact that exports were declining fast and the gold assets invested in sterling and sterling securities were no more realizable in gold. Besides, as the gold value of sterling was liable to fluctuate from time to time, the maintenance of the gold value of the rupee at a fixed level would have made the already uncertain budgetery position more uncertain. Secondly,

^{*} See L. C. Jam: Monetary Problems of India, P. 38.

India could have also gone off the gold standard, i.e., the rupee would no longer be convertible into gold for internal or external purpose and would be left to find its own exchange level. This course would have involved fluctuations not only in the rupec-sterling exchange but also in the rate of exchange in general with all its adverse effects on trade and uncertainties in the budgetery position of the Government. The third alternative was to link the rupee with sterling at a fixed rate. Inder this arrangement the rupee would be exposed to fluctuations in value in sympathy with sterling without any regard of the conditions affecting the rate of exchange in India itself. But on the other hand it would stabilize exchange in relation to currencies of the sterling block and to put trade with those countries (which is more than half the total external trade of India) on a more certain basis, though exchange with other countries would be liable to fluctuate. However, if the rupee-sterling ratio was to be maintained at 15 6d., which was clearly in Britain's interests and, which the Government was determined to maintain at all cost, the linking of the rupee to sterling was the only alternative open to the Government.

Accordingly, on September 21, 1931, the Government of India promulgated a Currency Ordinance, which suspended Section 5 of the Currency Act of 1927 and relieved the Government from the obligation of selling gold or sterling "when demanded at rates therein fixed." As the Government was no longer under a statutory obligation to buy or sell gold or sterling at is. 6d., it meant the divorce of the rupee from gold as well as sterling, i.e., the abandonment of the rupee to find its own level. This decision would have been welcomed in India as it would have rendered reversion to the old is. 4d. ratio possible, had not the Secretary of State made on the same day a different statement, which in effect announced his determination to maintain the 1s. oil. ratio "in India's interests," -which could be done only by linking the rupee to sterling. The policy enunciated by the Secretary of State being diametrically opposed to the provisions of the Currency

Ordinance of September 21, an atmosphere of acute uncertainty was created in the exchange market. In order to save the banks from this embarrassing position, the Government promptly declared the three following days as holidays under the Negotiable Instruments Act. On September 24, the Ordinance of September 21 was repealed and a new Gold and Sterling Regulation Ordinance was issued.

The new Ordinance in effect introduced the sterling exchange standard by linking the rupee to sterling at 15 fd. But the sales of sterling were restricted only to recognized banks for trade purposes through the Bombay and Calcutta branches of the Imperial Bank of India. These restrictions were imposed with the object of preventing speculation in exchange and flight of funds from India.

Merits of Linking the Rupee to Sterling. It may be pointed out at the outset that the most enthusiastic advocates of linking the rupee to sterling at 18 6d are to be found almost exclusively among our Government and its henchmen. support of this arrangement they contended, and, as we have already explained, with considerable justification, that by linking the rupee to sterling instead of allowing it to find its own exchange level, its value has been stabilized at least in terms of sterling and currencies of the sterling block, which is a great advantage in view of the fact that nearly half of India's foreign trade is carried on with Britain and various countries whose currencies are linked with sterling. Again they point to the obvious advantage, to which we have already referred, that the Government of India have to remit to Britain nearly f. 32 million sterling annually, so that the pegging of the rupee to sterling eliminated uncertainty in Government of India's budgetry position, which would have certainly crept in had the rupee-sterling ratio been subject to fluctuations—as might well have happened had the rupee been allowed to establish its own value in relation to foreign currencies. As to the argument of their opponents that the attempt to maintain the rupee at 18, 6d, sterling would lead to the depletion of the none too plentiful gold reserves of the country, they argued that no such danger existed in view of restrictions on the sale of sterling. And lastly they pointed out that the linking of the rupee to sterling (and thus depreciating it artificially to the extent sterling was depreciated) would give an impetus to exports from India to the gold standard countries.

Arguments against the Linking of the Rupes to Sterling The opposition to the linking of the rupee to sterling was not confined to any particular class or group, but was country The various bodies representing commerce, industry and agriculture condemued the new arrangement unanimously and in no uncertain terms; but in vain. That the Government expected a universal opposition in the country to the new system is shown by the fact that the system was introduced by the executive without consulting the Legislature. The opponents of the new system hit the nail on the head when they pointed out that the rupee had been linked with sterling in Britain's interests, because the new arrangement would result in preference to imports from Britain as against goods from the various gold standard countries—the countries that happened to be better markets for India's products than Britain had ever been or was ever likely to be. The friends of the new system had not the colour to explain away these serious allegations. On the other hand, as we have seen, the charge that the new system would lead to the depletion of India's gold reserves was met to a certain extent by the spokesmen of the Government. But again, the charge that by anchoring the rupee to sterling the gold value of the former would fluctuate exactly according to fluctuations in the gold value of the latter regardless of its own intrinsic value with all its adverse effects on trade. especially if sterling continued to depreciate still further, remains unanswered to the present day. Luckily, however, for the country, fluctuations in the value of sterling have not been very violent, and India has not suffered all the vicious consequences of anchoring her currency to the depreciating currency of a foreign country.

Consequences of the New System. There can be no doubt that the linking of the rupee to sterling would have been disastrous to India had the latter continued its downward course in relation to gold. But as the value of sterling has not fluctuated very violently, we should have no hesitation in saying that on the whole the linking of the rupee to sterling has been a lesser evil than the allowing of the rupee to find its own level would have been. Trade statistics show that Britain has gained in consequence of the new system; but then it must be conceded that she has gained at the expense of other countries and not India.

But the most important consequence of linking the rupee to a depreciated sterling was the exports of gold from India on an enormous scale consequent upon rise in its price. The price of gold in India went up by over 30 per cent, within a few weeks after the new system came into operation; and as there was widespread misery in the country consequent upon trade depression, the people availed themselves of this opportunity of selling their hoards of gold at a profit. Thus the exports of gold from India began. As time went on, further falls were registered (though by slow degrees) in the gold value of sterling, with the result that the price of gold in India went up correspondingly. This rise in the price of gold gave further impetus to exports of gold. Up to February 15, 1935, more than 220 crores worth of gold had left the country. And still there are no signs of its declining.

The remaining consequences of the linking of the rupee to sterling may be discussed in connection with gold exports. We have seen that the Government of India has to remit annually nearly £32 million sterling to Britain, and that these payments are normally made with the balance of exports over imports. Now since 1930, the favourable balance of trade has dwindled down to insignificant proportions. How are remittances to be effected in these circumstances? It is to a large extent the exports of gold that have made these remittances possible. Again, these gold exports made it possible for the Government to pay off India's sterling debt of £15 millions which had fallen due. In these circumstances it would have been impossible for the Government to maintain the 18. 6d. ratio,

to which it has been so tenaciously clinging, without the assistance of this exported gold—unless, of course, it had gone to the length of supporting the exchange by means of loans abroad. Again, gold exports have helped more than anything else to sustain the purchasing power of India and to maintain imports. Thus the policy of helping British trade and industry by manipulating India's currency system found its consumnation in, and was assisted by, exports of gold from India. And finally, as these exports of gold have sustained imports into India, they have been to no mean extent responsible for balancing the budget of the Government of India during the past three years—seeing that nearly 60 per cent. of the ordinary revenues of the Indian Government (not including those from railways which are credited to the railway interest charge and other accounts) are accounted for by customs duties.

Proposal regarding Purchase of Gold by Government It has often been suggested that, instead of allowing the exports of gold in such large quantities, the Government should have purchased the metal and so enabled the Reserve Bank to start operation with adequate supplies of gold and at the same time prevented the gold from leaving the country. Government has defended its attitude in this matter by retorting that "the currency authority should not acquire gold at a higher price than that fixed by statute, and that any purchase in contravention of this rule would amount to an unwarranted speculation in gold." How far this excuse is valid and to what extent this policy of non-intervention is inspired by some ulterior motives is shown by the fact that both the Bank of England and the United States Treasury have been purchasing gold in large quantities since the two countries went off the gold standard, while the Government of India would not soil their hands with gold that was going a begging. And all this is supposed to be in India's interests. The fact is that the Government is determined to maintain the 1s. 6d.

^{*} Indian Finance year Book, 1932, P. 43 quoted by L. C. Jain in the Monetary Problems of India, P. 52.

ratio even if it has to smash the economic life of the country to pieces in the process. If the Government had purchased a substantial part of the gold now leaving the country, it would have added to the purchasing power of the people in exactly the same manner as the exports of gold have done. The balance of trade would also have been affected in the same manner. The adverse balance of account would have to be covered by exports of gold by Government. On the other hand refusal to part with gold would have made it impossible for the Government to maintain the rs. 6d. ratio, which was the last thing the Government was prepared to countenance. At any rate, even after exporting gold with a view to supporting the exchange, some quantities of the metal would have been saved for the country, which would have been better than not saving anything at all.

V. PAPER CURRENCY.

The Paper Currency Act of 1861. Before 1861 the Presidency Banks of Bengal, Bombay and Madras enjoyed the right of note issue, and this right was conferred upon them by the Acts of 1839, 1840 and 1843 respectively. But communications being undeveloped and difficult in those days, the circulation of notes was confined practically to the three Presidency towns, and moreover, they were not legal tender in other parts of the country. The issue of notes by the three Presidency Banks was limited to Rs. 5 crores by statute. The Paper Currency Act of 1861 took away the right of note-issue from all private banks and made the issue of paper currency a monopoly of the Government of India. The various provisions of this Act in regard to note issue and reserves were based on the principles underlying the English Bank Charter Act of 1844. Notes of various denominations were to be issued by the Government through a newly created Paper Currency Department. The Act divided the country into three circles for purposes of note issue, viz., Calcutta, Bombay and Madras, but later on Cawnpore, Lahore, Karachi and Rangoon were added to the list. Notes of the denomination of rupees 10, 50, 100, 500,

1,000, and 10,000 were to be issued without limit at all Currency Offices against rupees and gold. These notes were to be unlimited legal tender within their circle of issue and could be presented for encashment only at the head office of the circle to which they belonged. Following the principles underlying the English Bank Charter Act, the Indian Paper Currency Act of 1861 fixed the fiduciary issue, or the amount of paper currency issued against securities, at Rs. 4 crores, thus making it obligatory upon the Government to provide a hundred per cent. cover in coin and bullion against notes issued in excess of this fiduciary limit. These restrictions on the fiduciary issue were the outcome of over-cautiousness of the Secretary of State about ensuring the convertibility of notes.

Main Defects of the System, By limiting the fiduciary issue to Rs. 4 crores, the Paper Currency Act of 1861 made the system thoroughly inelastic and unprofitable. As the Government had to provide a full metallic cover for the entire amount of paper currency issued over and above the four crore limit. it could not expand currency in busy seasons when the requirements of trade in the matter of currency would be greater than at other times. In other countries where the banking and cheque systems are highly developed, these seasonal demands for currency are met partly by the issue of extra paper currency and partly by the expansion of credit, and sometimes, as in England, by the latter alone. In India the banking system being still far from adequately developed and payments by means of cheques being very uncommon, the expansion of credit could not have helped trade to any great extent during the busy seasons. Thus the issue of paper currency could not have satisfied its first fundamental object. Nor was the issue of paper currency conducive to economy, for the issuing authority did not gain anything worth reckining in the process. Moreover, the restrictions with regard to the encashment of notes within the circle of issue and the limitation of the areas within which the notes were legal tender robbed the paper currency of all chances of gaining popularity at a rapid pace. In these circumstances it is not to be wondered at that even during the closing years of the nineteenth century note circulation in India amounted to only about Rs. 30 crores.

Changes in the System: 1861-1914 But in spite of the fact that the paper currency system as established by the Act of 1861 was inelastic, uneconomical, inconvenient and unprogressive, it underwent few changes of any great consequence during the last forty years of the nineteenth century. In order to keep pace with the gradual increase in note circulation the fiduciary portion was no doubt gradually increased from Rs. 4 crores in 1861 to Rs. 14 crores in 1911; but this increase in fiduciary portion was far behind the increase in note circulation. In 1862 securities formed nearly 40 per cent, of the paper currency reserve, but by 1913 the proportion had steadily fallen to only 20 per cent. As regards the removal of restrictions on the circulation and encashment of notes, nothing was done till 1903. In that year the five-rupee note was made universal legal tender. In 1910 ten and fifty-rupee notes and in the following year hundred-rupee notes were universalized. the convenience of public, facilities for the encashment of notes were provided at Government treasuries and the Presidency Banks and their branches; but these institutions were under no legal obligation to undertake the encashment of notes.

Some elasticity in the paper currency system was also accidentally introduced as a result of drifting towards the gold exchange standard. We have seen that in consequence of the closing of mints to the free coinage of silver in 1893 the face value of the rupee was gradually divorced from its intrinsic value. By 1898 the exchange or face value of the rupee had gone up to 1s. 4d., while it contained only about 1od. worth of silver, "but under the terms of the law governing the Indian Paper Currency system, it continued to be a legitimate form of the Indian Currency Reserve. A ten-rupee note could thus be issued by buying silver worth even less than six rupees, and keeping the latter in the Paper Currency Reserve as the necessary metallic basis under the law. The system thus acquired

through inadvertance a certain degree of elasticity and economy owing to a change in the character of the rupee."*

The closing of the mints to the free coinage of silver in 1803 with the objects of linking the runce to sterling at a fixed ratio rendered it desirable to introduce some changes in the paper currency reserve. Up till 1803 the entire metallic reserve consisted of silver coin and bullion, but in that year the Covernment obtained statutory power to issue notes to an unlimited extent against gold coin and bullion. In 1898 the Covernment for the first time began to keep in London a part of the gold belonging to the paper currency reserve. It was a temporary arrangement to begin with, but the Acts IX of 1902 and III of 1905 made it permanent by providing that the Government could hold the reserve in rupees (which were to be kept in India only) and in gold coin, bullion or securities in India or London. During the initial stages this transference of a part of the reserve to London was effected with a view to providing funds for the purchase of silver for minting rupees (into which notes were convertible); but later on this reserve was used for supporting the exchange when it showed signs of weakness. Immediately after the possibilities of using these reserves for supporting weak exchange were realized, the Government began to multiply this portion of the paper currency reserve as fast as possible. Thus outwardly these reserves were maintained in order to ensure the convertibility of notes, but in reality they were regarded only as a part of the gold standard reserve and were used as such.

Paper Currency during the War. The unsuitability of the prevailing paper currency system to Indian conditions was clearly perceived by the Chamberlain Commission, and in order to remove the various defects they suggested some far-reaching changes in the system, the most important of them being in connection with the provision of extra facilities for the encashment of notes and the introduction of elasticity into the system.

^{*} See H L. Chablani: Indian Currency, Banking and Exchange, p. 22.

The detailed discussion of these recommendations, however, need not detain us here, as they were never acted upon on account of the intervention of war.

The abnormal conditions arising out of the war, to which we have already referred in the preceding pages, necessitated changes of far-reaching importance in the paper currency system of India. It may be pointed out at the outset that all these changes had their origin in the inability of the Government to liquidate the heavy favourable balance of account by minting fresh tupees owing to the inavailability of silver for that purpose. When an adequate supply of rupees was not forthcoming, the Government began to meet its currency obligations by issuing paper currency which was backed not by rupees or gold but by securities. The legal limit of the fiduciary issue, which was fixed at Rs. 14 crores before the war, was raised as many as nine times between 1915 and 1919 till it touched the 120 crore limit in 1919. Of this amount Rs. 20 crores could be invested in Government of India securities. Some idea of the magnitude and importance of this change may be had from the fact that while on March 31, 1914 securities formed only 21.10 per cent of the paper currency reserve, by March 31, 1010 the proportion had gone up to 64.6 per cent. In its anxiety to economise the use of silver the Government went a step further and issued Rs. 2-8 and Re. 1 notes in December 1917 and January 1918 respectively. As the Government was meeting the demand for currency in the country mainly by issuing notes of various denominations, the circulation of notes (gross) increased from nearly Rs. 66 crores on March 31, 1914 to nearly Rs. 1531/2 crores in March 31, 1919. When at the latter date the metallic reserve was allowed to come down to the dangerously low level of 35.4 per cent. of the gross note circulation, the Government could obviously meet its obligations only to that extent and no more, if notes were presented in large amounts for encashment. The Government tried to guard itself against this eventuality by withdrawing in 1916 the facilities for the encashment of notes at the district treasuries: but in spite of these precautions the danger was averted but

only partly, for the Government was still legally bound to pay rupees for notes at the various currency offices. How dangerous and reckless the policy of the Government was, became apparent when, as a result of the news of successful German offensive on the Western front in April 1918, there occurred a run on the Currency office in Bombay, which compelled the Government to adopt such extreme measures as the prohibition of the booking of specie by rail and steamer and the limiting of the daily issues of rupees to individual tenderers. Indeed, India's paper currency had become inconvertible in all but name; and this inconvertibility would have inevitably received legal recognition had it not been for the timely purchase of 200 million ounces of silver from the United States Government.

Recommendations of the Babington Smith Committee regarding Paper Currency. It is evident that as a result of war the paper currency system of India had undergone some radical changes. These changes were, among other things, examined in 1919 by the Babington Smith Committee who made some recommendations that were calculated to remove all the various defects from which the paper currency system of the country suffered before and during the war. Firstly as regards reserves they recommended that the statutory minimum for the metallic portion of the reserve should be fixed at 40 per cent of the gross circulation and that the fiduciary portion of the reserve should consist of not more than 20 crores of Government of India securities, the balance to be held in securities issued by other Governments within the British Empire of which not more than 10 crores should have more than one year's maturity. But the existing permissive maximum of 120 crores was to be retained for a limited period. Further, as the exchange value of the rupee was to be fixed at 25, they recommended that the sterling investments and the gold in the paper currency reserve should be re-valued at this rate. Secondly, in order to meet the seasonal demand for currency they recommended that provision should be made for the issue of notes up to Rs. 5 crores over and above the normal fiduciary issue as a loan to the Presidency banks on the security of export bills of exchange.

Thirdly, as regards the location of metallic reserves, they recommended that all silver and gold in the paper currency reserve should be held in India, except for transitory purposes. And lastly they recommended that while the Government should retain the option of redeeming its notes in full legal tender gold or silver coin, it should restore as soon as possible all the pre-war facilities for the encashment of notes.

Government's action on the Report. The recommendations of the Babington Smith Committee were, with slight changes, incorporated firstly in the Paper Act of 1920 and finally in the consolidating Act of 1923. The Act of 1920 fixed the minimum of the metallic portion of the reserve at 50 per cent. (instead of 40 per cent. recommended by the Committee) of the gross circulation. It further provided for the revaluation of gold bullion and sterling securities at 2s. to the rupee. Again, the maximum amount to be held in Government of India securities was fixed at Rs. 20 crotes, and of this not more than Rs. 12 crores were to consist of created securities. The remainder of the invested portion was to be held in British securities maturing within 12 months. It was provided that not more than £5 million in gold bullion was to be held by the Secretary of State. And lastly the Act authorised the Covernor General in Council to issue notes up to five crores in value to the Imperial Bank of India against trade bills discounted by the bank and maturing within 90 days of the date of issue. This issue of notes against trade bills was to be reckoned as a loan to the Imperial Bank on which the bank was to pay to the Government interest at the rate of 8 per cent., and as such the issue of notes under this head was not to be subject to the provision regarding the holding of 50 per cent, metallic reserve against paper currency in circulation.

The re-valuation of gold bullion and sterling securities at the new rate (2s to the rupee) rendered the adoption of certain transitory measures necessary. It will be noticed that this revaluation would automatically reduce, as measured in terms of rupces, the value of gold bullion and sterling securities by one-third. Before, therefore, the 50 per cent. metallic ratio required by the Act of 1920 could be adopted, it would be necessary to fill the gap caused by the re-valuation of gold bullion and sterling securities held in the paper currency reserve. Thus it became necessary to make some temporary provisions with a view to filling up the gap. To be concise it was provided that the gap should be filled up by the so-called ad hoc securities to be issued by the Government of India, and that these created securities should be gradually replaced by sterling securities until the statutory limit of 12 crores regarding the holding of such created securities in the paper currency reserve was realized. But as adequate funds for the purchase of sterling securities were not available, it was provided that interest accruing from the invested portion of the paper currency reserve. profits from the coinage of rupees, interest on the gold standard reserve when the latter exceeded £40 million, and interest on trade bills deposited by Imperial Bank of India with the Controller of Currency for the issue of additional paper currency should be utilized for reducing the amount of created securities held in the paper currency reserve to 12 crores. The invested portion of the reserve was, however, fixed at Rs. 85 crores for the time being. But these provisions were never carried out; "the income from Paper Currency Securities has been appropriated to general revenues on one pretext or another; so also the interest on the securities in the Gold Standard Reserve except during the years 1921-22 and 1922-23."*

By 1023-24 it became obvious that the provisions for the expansion of currency to meet the demands of trade in busy seasons were far from adequate. The Act was consequently amended in 1023-24 raising the maximum limit from 5 to 12 crotes. It was further provided that loans against trade bills should be made available to the Imperial Bank immediately the bank rate went up to 6 per cent., and the minimum rate of interest chargeable on these loans was fixed at 6 per cent for the first 4 crores, 7 per cent for the second 4 crores and

^{*} See H. L. Chablani: Indian Currency, Banking and Exchange, p. 37

8 per cent for the third 4 crores. But, on account of traderevival, so great was the demand for currency during the busy season of 1923-24 that in September, 1924 the Government of India announced its willingness to advance 4 crores when the bank rate stood at 6 per cent., and 8 crores when the rate went up to 7 per cent. The Act was further amended in 1925 and the limit of security holdings in the paper currency reserve was increased from 85 to 100 crores. But the adoption of this more liberal limit was to be subject to the condition that the holding of created securities in the reserve should not amount to more than 50 crores.

Recommendations of the Hilton-Young Commission. The paper currency system as established by the Acts of 1920 and 1923 was examined by the Hilton-Young Commission in 1926, who, in order to put the system on a more scientific basis. suggested modifications of a revolutionary character. Commission recommended that the Covernment should cease to be a note-issuing authority, and should delegate this function to a Reserve Bank, thus bringing about the unification of currency and credit control. They further recommended that, instead of the fixed fiduciary issue system, a proportional reserve system should be adopted so as to make the note issue still more elastic. In keeping with the requirements of the gold bullion standard recommended by the Commission, notes were to be convertible by law not into rupees but into gold bars in quantities of not less than the specified minimum of 400 ounces. Against its notes the Reserve Bank was to keep in reserve gold and gold securities which were not to be less than 40 per cent, of the total note issue plus 50 crores on account of outstanding rupees subject to a possible reduction with the consent of the Governor General in Council on pavment of a tax. The Reserve Bank was to be under no statutory obligation in regard to the conversion of notes into rupees, though it was to be legally bound to give gold bars in exchange for them (provided the above-mentioned conditions were satisfied), and to convert all notes, except one-rupee notes, into notes of smaller denominations or silver rupees at its obtion.

This provision in regard to the payment of rupees for notes was calculated to render the currency system of India immune from the disintegrating influences of a possible rise in the price of silver. The Commission also recommended the reintroduction of one-rupee notes which, like notes of other denominations, were not to be convertible into rupees.

While the Commission recommended that gold and gold securities should not form less than 40 per cent of the paper currency reserve, they suggested that the Reserve Bank should try to increase this ratio to 50 or 60 per cent. Again, with regard to gold holding they recommend that it should be brought up to 20 per cent. of the reserve as soon as possible, and to 25 per cent. within 10 years. At least half of this gold was to be held in India. On the other hand the silver holding was to be reduced from 85 crores to 25 crores within 10 years. The remainder of the reserve was to be held in rupee securities of the Government of India and in trade bills. The rupee securities however, were not to be more than 25 per cent. of the reserve, or Rs. 50 crores, whichever was less.

Government's action on the Report. The recommendations of the Commission were accepted by the Government and incorporated into two Bills, which were introduced in the Legislative Assembly early in 1927. The provisions of the first Bill (which became Act V of 1927) have already been discussed in a preceding paragraph. However, as a result of this Act gold and gold securities held in the paper currency reserve were revalued at the new exchange rate of 1s. 6d. (instead of 2s.) to the rupce. In consequence of this re-valuation at a lower rate the holding of gold and sterling securities registered an increase of Rs. 030 lakhs in value. This amount was utilized for cancelling Treasury Bills of equivalent value.

But the recommendations of the Commission in regard to the establishment of the Reserve Bank and the transfer of the function of note issue to the Bank were incorporated in the second Bill. This Bill never became an Act of the Legislature on account of differences of opinion over the constitution of the proposed Reserve Bank. Thus the note issue remained a function of the Government.

The New Reserve Bank of India Act. Nothing was done in the direction of the transference of currency control, till 1031 when the Federal Structure Sub-Committee of the First Round Table Conference recommended that, with a view to ensuring confidence in the management of Indian credit and currency, efforts should be made to establish on sure foundations and free from any political influence, as early as may be found possible, a Reserve Bank which will be entrusted with the management of currency and exchange. Then came the Financial Safeguards Committee of the Third Round Table Conference, which made the establishment of federation in India dependent upon the establishment of a Reserve Bank. The upshot of this manoeuvering was that the Reserve Bank of India Act was passed in March 1934. The constitution and functions of the projected Reserve Bank will be discussed in detail in connection with Banking and Money Market in the next chapter. At this stage, however, it may be mentioned that when the bank begins to function in April, 1935, the management of paper currency and reserves was handed over to it by the Government. Thus the unification of currency and credit control has at last been realized.

Note Circulation and the Composition of the Paper Currency Reserve. A glance at Table A will show that the character of the paper currency reserve has undergone vast changes since the war. To begin with, it will be noticed that note circulation has increased by nearly 200 per cent. since 1914. On March 31, 1914 gross circulation amounted to 66,12 lakhs, and by the end of January, 1920 it had gradually reached the 185,15 lakhs level. From that time onward each month registered some decline, till September, 1920, when the gross circulation amounted to 157,63 lakhs. Once again there was an upward movement until the circulation had steadied in the neighbourhood of 175,00 lakhs during the last quarter of 1921. In 1923 it began to move upward again, and by the end of the year it once again steadied

TABLE A.

Showing the Composition of the Paper Currency Reserve.

In lakhs of supees.

		(Con and Bullion	Bullion		Secui	Securities.	Internal
Date		Circulation	Gold in India	Gold out of	Salver Coin.	Silver Bullion	Rupees Securities	Sterling Secunties	Bills of Exchange.
March,	1914	66,12	22,44	9,15	z0,59	Nil	10,00	1 6,4	Nii
:	1920	1,74,52	44,36	3,45	33,22	6,63	19,59	67,27	E E
:	1925	1,54,19	22,32	ī,	70,02	6,73	57,13	20,00	8,00
• •	1926	1,93,34	22,32	EZ.	77,25	2,66	57,11	29,00	7
:	1927	1,84,13	22,32	E.	95,94	8,53	49,77	5.57	2,00
:	3261	1,84,57	92,62	ZZ.	qS,72	2,65	37,96	3.77	7,00
•	1029	1,88,03	32,22	- Xii	94'61	4.95	43,23	10,69	2,00
=	1930	1,77,23	32,27	i.	108,11	2,85	33,85	15	
=	1931	1,60,84	25,85	iz -	117,80	6,94	61,01	ı. Nil	EZ.
1	1932	1,78,14	5,26	IK	96'101	9,22	57.94	IN.	3,75
:	1933	1,70,90	25,00	- Ni	96,34	15,52	39,05	N.	Z
January,	1934	1,77,96	30,50	EZ -	90,14	50,01	46.35	Nil	5
:	1935	1,83,99	41,55	Z	80,60	13,95	33,63	14,24	
eptember	10:01	2,02,44	41,55	1 2,87	67,31	N	23,39	67,32	EZ -

itself in the neighbourhood of 185,00 lakhs. With slight seasonal fluctuations it remained at that level until the beginning of trade depression in 1930. The decline began in the month of March of that year, and each month registered a decline till September 1931 when circulation had sunk to the level of 148,74 lakhs. With the abandonment of the gold bullion standard in September 1931 began the expansion of paper currency; almost every month showed a slight increase, and on January 15, 1935 the circulation stood in the neighbourhood of 184,00 lakhs.

As regard reserves, it will be noticed that while in March 1914 there was 31, 59 lakhs worth of gold against 66,12 lakhs note circulation and in addition to that there were 400 lakhs in sterling securities, in March 1033 the gold reserves amounted to only 25,00 lakhs against 1,76,00 lakhs circulation. It was a legacy of war-time currency bungle from which the Government had made no serious effort to extricate itself. Up till 1929 varying amounts were invested in sterling securities; but by the end of 1930 the Secretary of State had eaten up all those securities, because owing to exchange weakness no other means could be found of remitting funds to enable him to meet the Home Charges. By January 15, 1935, however, sterling securities to the value of 13,24 lakhs had again been accumulated in the paper currency reserve. At the same time gold bullion reserves had been increased to 41,55 lakhs, obviously with a view to enabling the Reserve Bank to start operations with adequate gold reserves. This increase has taken place at the expense of silver coin whose holding since March, 1933 had decreased in more or less the same proportion as the holding of gold has increased during the same period.

Paper Currency and Reserves under the Reserve Bank. The control of currency and credit was taken over by the Reserve Bank of India in April, 1935. It will be noticed that the Bank started operations with a much smaller amount of gold and sterling securities holdings than the minimum prescribed by the Hilton-Young Commission. The Reserve Bank, however, has improved its position in regard to its

holdings very considerably during the past eighteen months. As shown in the table above, the gross circulation on September 11, 1936, amounted to Rs. 2,02,44 lakhs. Against this the Bank held gold worth Rs. 41,55 lakhs in India and Rs 2.87 abroad, the latter amount indicating the net increase in gold holding since January 15, 1935. Sterling securities also increased from Rs. 14,24 to Rs. 67,32 during this period. Silver coin and Rupee securities, on the other hand registered a substantial decline: the former from Rs. 80,60 lakhs to Rs. 67,31 lakhs, and the latter from Rs. 33,63 lakhs to Rs. 23,39. Obviously, in increasing its gold and sterling securities reserves at the expense of silver coin and rupee securities the Reserve Bank has been closely following the recommendations of the Hilton-Young Commission. As gold reserves now form nearly 22 per cent. of note circulation, and moreover, as gold and sterling securities together provide over 55 per cent, cover to the note issue, the Reserve Bank has already very nearly achieved the ideal prescribed by the Hilton-Young Commission in regard to the composition of the reserve.

VI. The Future of the Rupee.

The Problem of the Standard. It is interesting to speculate on the probable changes in the form and substance of the rupee in the future. As far as changes in the form or the outer garb of the tupee are concerned, it is well to remember that at the present time the rupee is nothing more and nothing less than a silver note convertible into sterling at a certain fixed rate. Therefore, as far as form is concerned, the rupee can undergo two varieties of changes: it may become a full value coin, or it may be printed on a cheaper material than silver. It may be given the dignity of a full-value coin while retaining its present appearance (silver standard), or it may be translated into a gold coin (gold standard). Without the remonetization of silver in one form or another in other countries, the adoption of the silver or even a double standard in India is not feasible on the grounds which have been discussed threadbear by various Currency Commissions. On

the other hand, in the event of the rehabilitation of silver in other countries (which is a very remote possibility), the rupee will become a full value coin both under bimetallic and monometallic silver standards. But even if the rest of the world returns to gold, the translation of the rupee from a silver into a gold coin would never be a practical proposition. days of such monetary crudities as a gold standard with gold coin in circulation are now over, so that, like other countries, India must be content with a gold bullion standard—though not a gold exchange standard disguised as gold bullion standard, such as India had in force till September, 1931. The conclusion, in these circumstances, is that the possibilities of the rupee becoming a full value coin are extremely remote, and its translation into a gold coin would be an impossibility under prevailing conditions. But it would be equally difficult to deprive the rupee of its silver and to dress it up in paper on account of the fact that the illiterate and poor masses in India would never have any faith in the paper rupee. From this it follows that the form of the rupee must remain what it is at the present time.

The Problem of the Ratio. But its substance may change in the future. At the present time the value of the rupee has been fixed by statute at 15. 6d. sterling which may mean anything in terms of gold. If, and when, Britain returns to the gold standard. India would automatically do the same. As far as alterations in the sterling or gold value of the rupee are concerned, we may say that they are out of the question. The government has taken good care to see that, regardless of the economic requirements of the country, the ratio is not altered at any time in the future; and it has tried to perpetuate this ratio by providing (under the financial safeguards) in the Government of India Act (1935) itself that the revision of the ratio or monetary policy will require the prior consent of the Covernor General in Council, or in other words of the British Government. But it may be argued that during the past five years India has been meeting for foreign obligations mainly by exporting gold, and that when these exports of gold (which are

already declining fast) cease, the maintenance of the ratio will become an impossibility—if in the meanwhile the former excess of exports over imports is not re-established. There is a good deal of truth in this argument; but there it must not be forgotten that the Reserve Bank has Rs. 112 crores in gold and sterling securities at its disposal, and as the Reserve Bank of India Act makes it incumbent upon the Bank to maintain the 18. 6d. ratio, the government in its desperation is likely to require of the Bank to put all its reserves to the last farthing in defence of the ratio, even though India may be ruined in the process. And there is no doubt that, unless the trade depression starts all over again, the currency reserves of Rs. 112 crores combined with the resources of the London money market (which can be harnessed by raising loans) will always be adequate to save the ratio from a fall if the Government is determined to follow that course. In view of this stranglehold it is not possible to expect any change in the value of the rupee in the near future, no matter what the requirements of the country may be.

CHAPTER XIX.

PRICE MOVEMENTS.

Movement towards Price Uniformity. In times gone by, when modern transport facilities, which render the transportation of heavy goods quickly and at a cheap rate possible, were not available, prices differed from place to place according to local conditions of demand and supply, so that there were no such things as national prices, far less world prices, of commodities in those days. But conditions have changed with the introduction and development of mechanized land and sea transport. Even heavy and comparatively less valuable goods can be transported quickly over long distances at a low cost, so that the movement of bulky and less valuable goods is no longer confined to the neighbourhood of localities where they are produced: these goods have now an international market, so that their prices in various parts of a country—indeed the whole world—are brought in close contact.

If rom what we have said above it follows that, subject to differences consequent upon transport charges, prices in India atteined a comparatively uniform level, and were drawn into the orbit of world prices, only after various parts of the Indian continent were linked up by means of railways. But it will be seen that even this relative uniformity of prices has been confined to only those parts of the country which have been directly or indirectly influenced by the construction of railways, and that this area of relatively uniform prices has extended with the extension of railways and the development of roads. Even today, after more than three quarters of a century of railway development, prices in certain parts of the country (which are too far removed from the existing railway lines) are normally of a customary character, and are influenced by local rather than world condi-

tions. However, the price movements which we have to study in this Chapter refer to that area of the country where a relative uniformity of prices had been attained, or where prices had been brought under the influence of world prices. Needless to add, this area has been gradually expanding since the construction of railways first began, and now it covers a greater part of the country.

Price Movements during the Pre-war Period. Official index numbers of Indian prices have been compiled from the year 1861, and their study reveals a remarkable series of changes in the ever expanding zone of uniform prices in India-changes that were due both to internal and external causes. To begin with, the years 1861-66 comprised a period during which general (unweighted) index numbers of 39 selected articles recorded an increase of nearly 20 per cent. This rise in prices was directly attributable to the American Civil War. result of the cutting off of the supplies of cotton from the United States owing to the war, the price of cotton shot up to unheard of levels; exports of the fibre from India increased enormously in consequence; large quantities of specie began to arrive in the country in payment for these exports; a greater part of the imported silver was converted into rupees (mints being open to the free coinage of silver), which found their way into circulation and pushed up prices. A reaction set in during the latter part of the year 1866 when prices began to show a downward trend. The years 1876 and 1879 were famine years during which the price of foodstuffs naturally showed an upward tendency; but except during these two years, the period 1866-83 showed a continuous fall in prices. This fall in prices, more particularly during the latter half of the period under consideration, was more in sympathy with the fall in Western countries than a consequence of internal causes: during this period a number of European countries had adopted the gold standard, which naturally resulted in the lowering of gold prices, especially as these changes coincided with a falling off in the production of the metal. Meanwhile, the production of silver had increased since the middle of the 'seventies; but

far from rising the silver prices had actually declined owing to the relatively greater expansion of trade. But the supply of silver overtook the demand for it in the year 1883; and in 1885 the supply of silver being greater than the demands of trade in countries with the silver standard, silver prices began to move in the upward direction. This upward tendency continued right up to the year 1803 when mints in India were closed to the free coinage of silver. The most remarkable fact about the years 1883-03 is that while rupce prices in India were rising rapidly, those in the various gold standard countries were still on the decline—as during the period 1875-83. With the closing of the mints to the free coinage of rupecs in 1803 the upward tendency of prices in India was not only arrested, but actually a downward trend set in. In 1802 the index number of rupee prices stood at 103; in the following it came down to 102, and in 1894 (the base year) it touched the 100 level. The index number moved one point upward in 1895 owing to slight setback in agricultural production, but in the following year it stood at 106 owing to famine conditions, and shot up to 121 in 1807 owing to the persistence and greater intensity of famine over a wide area. With the restoration of conditions approaching the normal, the index number subsided to the level of 106 in 1808 and of 104 in the following year. We have seen that by 1808 the rupce-sterling ratio had come down 1s. 4d. and that in 1000 the Government of Judia was forced to resume the coinage of rupees on a large scale on its own account. Thus from the year 1900 with the inauguration of a new currency policy began the era of rising prices in India, which continued right up to 1920; and this rise in prices was more marked and persistent from the year 1905 onward. But this rise in prices was not peculiar to India: it was also noticeable in various gold standard countries, though to a lesser extent. The following table* show changes in price level in India during the years 1800-1012.

^{*} Prices Enquiry Report, by K. L. Datta, p. 29.

Year	Rupee Prices	Gold prices	Year	Rupee Prices	Gold prices
1890 1891 1892 1893 1894 1895 1896* 1897* 1898 1899	97 98 103 102 100 101 106 121 106 104 122 116	113 106 100 96 85 89 99 120 109 108 126	1902 1903 1904 1905 1906 1907 1908 1909 1910 1911	111 107 106 116 129 133 143 133 132 134	115 111 110 120 134 138 147 138 137 139 147

Causes of the Pre-war Rise in Prices: the Datta Committee's Diagnosis. The rapid and continuous rise in prices during the pre-war years became the subject of much criticism in India, and there was a widespread demand for an investigation into its causes and effects. The opponents of the Government, like the late Mr. Gokhale, attributed this rise to the currency policy of the Government. It was contended that the expansion of currency (at the rate of nearly 17 crores a year during 1902-07) under the Gold Exchange Standard System was the root cause of this rise; that under the new system the currency had ceased to be automatic in character, contracting and expanding according to the requirements of trade; that in the absence of melting and hoarding, every rupee issued by the Government remained in active circulation regardless of the actual requirements of trade in the matter of currency.

The Government, on the other hand, contended that as additions to the rupee circulation took place only against Council Bills, the expansion of rupee circulation represented a legitimate trade demand, so that the existence of redundant currency in circulation was out of the question. The Government further

Indicate famine years.

contended that although the volume of business had increased by over 120 per cent. during the years 1890-1910, the volume of currency in circulation had increased by only about 60 per cent. during this period.

These contentions of the Government were endorsed by the Prices Enquiry Committee which was set up in 1910 under the chairmanship of Mr. K. L. Dutta. The Report of the Committee was published in 1914, and its investigations covered the period 1800-1912. According to this Committee the rise in prices during the pre-war period in India was due to (1) factors peculiar to India, and (2) factor influencing the general level of prices all over the world.

Among the factors peculiar to India, the Committee took into account (a) increase in the demand for agricultural products in India and abroad without a corresponding increase in supply; (b) deficiency of rainfall in India in 1891-92, 1897, 1899 and 1997-08; (c) the substitution of commercial crops for food crops; (d) changes in the relative value of agricultural products in consequence of changes in the standard of living of all classes in the country; (c) the development of communications and consequent decrease in the cost of transport between various parts of India and between India and foreign countries, which brought price in India in closer touch with prices abroad; and (f) the development of banking and the consequent expansion of credit.

The world factors which, in the opinion of the Committee, were responsible for bringing about an upward tendency in prices in India, were (a) increase in the output of gold, (b) the expansion of credit, (c) increase in the demand for staple commodities and shortage of their supplies in the world's markets, and (d) frequent wars in various parts of the world accompanied by a rapid increase in the size of military and naval forces in western countries which diverted capital and labour from productive into unproductive channels. Ali these factors contributed in varying degrees towards raising prices abroad; and as the rupee had been linked up with gold through sterling, the changes in the price level abroad were reflected in India also.

Examination of the Datta Committee's Contentions There is no doubt that gold prices in foreign countries had gone up as a result of the various causes noted above; but the question arises: why had prices risen to a greater extent in India than in other countries? The Resolution of the Government of India on the Committee's report challenged the validity of the data on which its conclusions in regard to the shortage of food production in India as compared with the demand for it were based. It pointed out, inter alia, that the area under cultivation had expanded to a greater extent than the population of the country had increased, and that "the cultivated area at the close of the period under review included irrigated land to a considerably greater extent than at the outset", so that "the consequent improvement of outturn and increased certainty of securing it must have more than counterbalanced any slight defect in area as compared with population, if indeed any such defect had existed."* The Committee's contentions regarding the effects of the substitution of commercial crops for food crops do not carry much weight in view of the Committee's admission that the total area which the former had occupied at the expense of food crops was so small that the substitution could not have materially affected the price level. Even if commercial crops had displaced food crops, this change should have caused an increase in the price of food grains relatively to the price of commercial crops, and not a general rise in prices in the country.

Mr. Datta's contention that the rise in prices was partly due to change in the style of living of all classes of society, and that the demand for food, clothing, housing etc., had greatly increased as a result of these changes is also open to objection. This increase in demand for commodities in general must have brought about an increase in production, and this by itself unaccompanied by an increase in the volume of currency should have brought about a fall instead of a rise in prices.†

^{*} Quoted by H. L. Chablani, Studies in Indian Currency and Exchange, p. 58.

[†]Cf. H. L. Chablani: Studies in Indian Currency and Exchange, p. 61.

As regards the effects of the development of credit, it must be conceded that during the period covered by Mr. Datta's enquiry there had been a considerable growth of credit in India; but even then the volume of credit transactions was extremely small, almost negligible, as compared with the total volume of cash transactions in the country. In these circumstances the growth of credit could not have materially affected the general price level.

The Datta Committee rejected the suggestion that the rise in prices had been brought about by the expansion of currency by maintaining that there had been a far greater increase in the volume of business than in the volume of currency during the period covered by their inquiry. The Committee were led to this conclusion by relying upon faulty data and by adopting wrong methods of calculation and procedure. Firstly, in forming an idea of the increase in the volume of currency in circulation they somehow completely forgot to include the circulation of sovereigns and small coins in their estimates. Secondly, in calculating the changes in the volume of business they took the value of goods into consideration instead of their quantity. When the basis of the Datta Committee's calculations is corrected, the volume of currency at once increases while that of goods diminishes, and a reciprocity of movements in the volume of currency on the one hand and the general price level on the other is established. During the period 1800-1913 there was an increase of 98.8 per cent, in currency circulation, there was a rise of 58.4 per cent. in the prices, and the volume of goods had increased by 42.6 per cent. These figures prove conclusively that there was a direct connection between the expansion of currency and the rise in prices.

Prices During the War. With the outbreak of the Great War, the tendency of the prices to rise became more pronounced, and this rise in prices continued right up to the year 1920. But, as shown in the following table, the rise in prices was much smaller in India than in various other important countries.

Index numbers of wholesale prices in some important countries during the year 1913-20.

	India *	U. K.	U.S.A.	France	Japan	Canada
		j			! !	
1913		100	100	100	100	100
1914	100	מחד	98	102	96	102
1915	112	127	101	140	97	110
1916	128	160	127	188	117	132
1917	145	206	177	262	149	179
8101	178	226	104	339	196	199
1919	196	212	206	356	236	209
1020	201	295	226	500	259	244

The following table shows the rise in the price of some important commodities during the period 1913-20. The year 1913 has been taken as the base year.

Commodity.			 ez number (1920).
Rice			 152
Wheat		••	 174
Batley			 156
Gram			 208
Sugar		•••	 284
Cotton			 134
Tobacco			 189

The great rise in prices abroad during the war is explained by falling off in production in various belligerent countries on the one hand and the enormous inflation of credit and currency in those countries o the other. Naturally there was a rise in

Calcutta wholesale price index numbers with July 1914=100.

the price of articles imported from these countries into India. On the other hand the war also stimulated the demand for Indian products in the various belligerent countries with the result that there was a sharp rise in their price, and this rise was naturally shared by various commodities which were not exported. This rise in prices was stimulated by the monetary policy of the Government of India during the war. We have seen that from 1915 onwards the balance of trade was strongly in favour of India. This favourable balance would have normally been liquidated partly by the imports of specie. But as during the war, owing to restrictions on the movements of gold and silver in foreign countries, the imports of specie had decreased to the vanishing point, the Government had no alternative but to try to pay off the favourable trade balance by issuing fresh currency, especially notes. This inflation of paper currency was also resorted to by the Government for meeting its war-time expenditure to a certain extent. This naturally led to the inflation of currency on an extensive scale. Then there was the expansion of credit, which was helped by the issue of war loans, financed as they were largely by created bank deposits. This expansion of currency and credit during the war period and the years immediately following the war rendered a sharp rise in prices inevitable, which otherwise would never have been so pronounced.

But even as it was, there was a much greater rise in prices in foreign countries than in India. This was, in a nutshell due to the fact that trade, both internal and external, during the war was subject to governmental control and restrictions so that the system of free exchange of commodities had completely broken down. And when trade was subject to control and restrictions, and when, moreover, transport charges were abnormally high, there could be no uniformity of international prices. But even without these restrictions there would have been a considerable disparity in the price levels on account of the fact that currency in India had not been inflated to the same extent as in various foreign countries.

Effects of Pre-War Rise in Prices. A rise or fall in prices affects different sections of the community differently. As far as the country as a whole is concerned, the effects of rise and fall in prices must be studied with direct reference to price movements in other countries. We have seen that between 1893 and 1913 there was a general rise in prices all over the world, but that this upward movement of prices was more pronounced in India than in other countries. Rising prices stimulate production and trade, so that India as a whole must have benefited accordingly. The country also gained in foreign trade as a result of this relatively greater rise in prices in that it could import foreign manufactures (the rate of exchange being the same) at a smaller real cost. And, lastly, as a debtor country, India could meet her foreign obligations by exporting a smaller volume of merchandise.

We may now study the effect of this rise in prices on various sections of the community. Let us take the agriculturist and land-owning classes first. The rents being fixed in terms of money, their payment would mean less cost to the rvot in terms of produce, so that he will have more surplus at his disposal. Similarly he could discharge his obligations to his creditors at a less real cost. And finally, there being a smaller rise in the price of foreign manufactured goods, their purchase involved less cost in terms of his own produce. The tenant gained to a lesser extent when rents were payable in produce only; but he gained just the same in his transactions with the moneylender and in his purchases of imported articles. The land-owning classes on the other hand, who received more or less fixed money rents, suffered as a result of rise in prices because of fall in the purchasing power of money. Similarly, this rise in prices adversely affected the salaried classes who had fixed money incomes. As regards the labouring classes, for purposes of the present study we may divide it into three sections: rural labourers, urban labourers, and factory labourers. To take the rural labourers first, such statistics as are available for various parts of the country tend to show that the money wages of this class moved up faster than prices before the war,

and the same is true of urban labourers. In these circumstances far from being affected adversely by the rise in prices they actually improved their position during this period of rising prices. In the case of urban (unskilled) labourers the money wages kept pace with the rise in prices, though the rise in real wages was not so pronounced as in the case of rural labourers. In the case of factory labour also we notice the same tendency during the pre-war period.

Effects of Rise in Prices During the War Period. We have seen that prices in India had just doubled during the years 1914—1920, and that during this period other countries had experienced a greater rise in prices. So long as the rate of exchange was maintained at 1s. 4d., India had to export larger quantities of her own produce to pay for imports from foreign countries. With the appreciation of the rupee in terms of foreign currencies, however, the adverse effects of smaller rise in prices were neutralized. The effects of rise in prices during this period on various sections of the community were more or less the same as during the pre-war period, except in the case of factory labour whose wages did not go up exactly according to the rise in prices, and which consequently led to a series of prolonged strikes with all their adverse effects on production.

Period of Falling Prices: 1921-29. In 1921 prices all over the world began to show a downward trend, and this fall in prices was also experienced in India. As this fall in prices was of a uniform character all over the world, the position in connection with India's foreign trade and payments arising out of her foreign indebtedness remained the same as before the beginning of the slump—except, of course, in so far as it was affected by fluctuation in the rate of exchange. The effects of this fall in prices were quite the reverse of the rise in prices during the preceding period.

Prices During the Trade Depression Period. The fall in prices which had been slow and of a uniform character in all countries became suddenly more pronounced and erratic with the advent of the trade depression in 1930. Prices suddenly

came down with a crash all over the world; but this fall was much heavy in the case of India as compared with other countries. As shown in the following table, prices in India between March 1930 and March 1935 fell by nearly 40 per cent. as against only 16 per cent. in the United Kingdom, 12 per cent. in the United States, 22 per cent. in Canada, 12.5 per cent. in Australia, 6.5 per cent. in Japan, and 40 per cent. in France. Thus the prices in India and France have declined to the same extent, notwithstanding the fact that the rupee has depreciated to the extent of nearly 40 per cent. in terms of franc which is still on the gold basis. This fact alone apart from others, shows that the catastrophic fall in Indian prices is due to the manipulation of currency and exchange by the Government of India. While governments in other countries have so manipulated their currencies as to prevent a fall in prices as far as possible (without much caring for the effects of this policy on exchange) the Government of India has followed the reverse course.

Index numbers of wholesale prices in some important Countries of the World.

	In lia, Calcutta July, 1914=100).	U. K., Board of Trade (1930=100)	U. S. A. (1926=100).	Canada, (1926 = 100)	Australia, (1911 = 100).	Japan, (October, 1900=100)	France, (1913=100).
March 1930	125	104 3	90 2	919	164 7	195.9	558
1931	100	8 ⁹ .2	76 N	75 1	145 6	158 3	539
1932	91	87 7	66 0	69 1	143.8	158 5	444
1933	82	82 7	60.2	64 4	133 3	177.4	390
1934	68	88 2	73 7	72 0	145 9	176.9	394
1935	87	86 9	79 3	72 0	144 3	183 5	335

Consequences of Fall in Prices. In considering the consequences of fall in prices during recent years we have to

remember the facts that prices in India have fallen more heavily than elsewhere, and that while the gold price of manufactured goods has fallen by nearly 45 per cent., that of agricultural products has fallen by nearly 55 per cent. The price of agricultural products being lower in India than in various competing countries, the Indian producers find it unprofitable to export their produce, with the consequence that the export trade of the country has suffered in competition with other countries in the international market. Again, as there has been a heavier fall in the price of agricultural produce, India obtains manufactured goods from abroad at a higher real cost. And lastly, India's foreign obligations being fixed in terms of sterling, they can be met only by exporting larger quantities of merchandise, which again mean heavier real cost to the country. Thus the country as a whole has been impoverished in consequence of heavy fall in the price of agricultural products.

The various sections of the community have been affected differently by the fall in prices. The rents being fixed in terms of money, the cultivator finds a much greater part of his produce taken away by the landlord; and as the price of agricultural produce has fallen by nearly 55 per cent., the distress in rural areas has been acute and widespread. Nor has the land-owner gained in consequence of fall in prices. must leave something with the cultivator to enable him to live somehow, and, land revenue being fixed, a greater part (in some areas the entire amount and something over and above) of what he realizes from the ryot is claimed by the Government. The condition of even the cultivators who cultivate their own land, though slightly better, is far from happy: for they must pay the land revenue and part with a greater part of their produce in order to buy manufactured articles. We have seen in a previous chapter that all these classes are heavily in debt: in discharging their obligation to the moneylender, therefore, they have to make heavier sacrifices.

Wages of labour (both rural and urban), on the other hand, have not fallen to the same extent as prices have declined since 1929, so that the wage-earning classes as a whole have improved their condition. But, on the other hand, unemployment among these classes (except labour in organized industries) has increased in consequence of trade depression. People with fixed incomes (such as salaried classes) have also gained for the simple reason that the purchasing power of their incomes has enormously increased as a result of fall in prices. On the whole, however, the fall in prices has had disastrous consequences for India.

CHAPTER XX.

BANKING AND CREDIT ORGANIZATION.

Scope of the Subject. The two most important functions of banking institutions are, to put it in non-technical language, the collection of funds from those quarters where they are not needed and the granting of loans to those who are engaged in production and distribution with a view to enabling to carry on their activities more smoothly efficiently. In these circumstances the lending capacity of the banks, or the extent to which productive and distributive activities can be helped by the banks, would to a very large extent depend upon the magnitude of the deposits which they can attract. We shall thus have to study the organization of banking in India, the adequacy of that organization to mobilize the capital resources of the country and the extent to which it can help in financing the internal and external trade of the country, as well as agriculture and cottage and organized industries. Further, the capital requirements of the Government, which is the largest borrower in the country, will have to be taken into account and the possibility of meeting them from various sources will have to be studied. We shall first study the evolution and organization of banking in India.

The Indigenous Bankers. In studying the evolution of banking in India we find that the banking profession is as old as Indian commerce itself. There is plenty of evidence to show that bankers, who carried on some of the main functions of modern banks, flourished in India in the pre-Christian era. In spite of the political turmoils through which India passed, they continued to flourish all through the centuries; and even now, in spite of the development of banking on modern lines, they occupy a commanding position in the country's economic and credit organization. They are responsible to a preponderating extent for financing agriculture, handicrafts and the internal

trade of the country: in fact it would be hardly an exaggeration to say that they are responsible for meeting more than 80 per cent. of the credit requirements of the country.

The Central Banking Enquiry Committee divided these indigenous financiers into two main classes, viz., money-lenders and bankers. According to them a money-lender is an individual or a family partnership engaged in making loans but not usually receiving deposits or dealing in hundis, i.e. internal hills of exchange. A banker, on the other hand, is defined as an individual or a private firm which in addition to making loans receives deposits or deals in hundis. The money-lender class is found in almost every village and town, and, as a rule individuals and families engaged in this profession also carry on ordinary trading activities. In spite of the development of co-operating credit institutions during the past thirty years, the money-lender is still the main source of credit to the agriculturist and artisan in the village and to the small trader, labourer and artisan in the town. Some idea of the extent of the moneylender's activities may be had from the fact that the indebtedness of agricultural classes alone in India is estimated to amount to about Rs. 1,000 crores, almost all of which (in the absence of much contact with indigenous bankers proper and modern banking institutions as well as the negligible extent of co-operative activity) must have been contributed by the moneylender. However, these village and town money-lenders generally operate with their own capital; but sometimes they establish business connections with shroffs or indigenous bankers with a view to seeking accommodation in times of emergency. They charge unusually high rates of interest—anything between 12 per cent. and 300 per cent.—which suggests that the financial facilities available for productive purposes are very unsatisfactory.

The shroff, or the banker proper of indigenous type, is an indispensable part of the Indian banking system. It is he who finances small-scale production and distribution. In the field of production he supplies credit to the agriculturist and the more well-to-do artisan, while on the distributive side he is

mainly responsible for the movement of crops from the local markets to the cities and to the ports for export purposes as well as for the distribution of imported and locally manufactured goods from the various centres of trade to the entire countryside. Unlike the money-lender, he does not operate entirely with his own capital, for he receives deposits and, moreover, discounts his bills or hundis with the Imperial Bank of India and other modern banks. The shroffs on the Approved List of the Reserve Bank of India will now be in a position to avail themselves of discounting and rediscounting facilities offered by the Central Banking institution in the country. These shroffs often discount the hundis of smaller indigenous bankers who in turn finance the money-lender; and it is in these circumstances that the shroffs are said to be the connecting link between the modern organized banking institutions and the indigenous banking system, and thus bringing about a sort of unity in the credit organization of the country,

But banking is not the only occupation of all the shroffs in India: most of them are also engaged in various kinds of trading operations, so that they often invest the deposits received by them in their own business which, from the point of view of sound banking principles, is a very hazardous arrangement. These activities as well as the fact that they are able to charge fairly high rates on loan and discount services explain why they are in a position to pay heavier rates of interest on deposits than the various organized banking institutions. As has been pointed out above, the smaller shroffs seek accommodation from the bigger shroffs who approach the joint stock banks and the Imperial Bank (and those on the approved list will now approach the Reserve Bank) for the purpose, so that the small shroff naturally charges a higher discount rate than the bigger shroff, and the latter's rate is higher than the bank rate, the difference in each case constituting the profits of the weaker party. may be mentioned here that each modern organized bank in the country has its own approved list of indigenous bankers whom it offers discounting and other facilities. In the face of these restrictions the number of indigenous bankers who are

dependent for accommodation on more powerful bankers of their own class is much larger than that of the bankers who can fall back directly upon organized banking institutions. And this is one of the weakest links in the chain of Indian credit organization, for the absence of direct connection with the primary or secondary source of credit makes "retail" credit dearer for a majority of borrowers, and dear money retards the progress of industry, agriculture and trade. And here we might repeat that the indigenous banker is the main source of credit to by far a large majority of producers and distributors in India.

Early European-managed Banking Institutions and the Presidency Banks. Up till about the beginning of the nineteenth century there were no modern organized banks in India. The Agency Houses of Calcutta were the bankers to the European Community as a whole in Bengal; but although they carried on their business on more or less up-to-date lines, they were in reality mere replicas of indigenous bankers of the present day inasmuch as they had other activities besides banking to occupy their attention. However most of these Houses collapsed during the crisis of 1830—32 in consequence of their being engaged in speculative transactions.

During the early years of the nineteenth century dissatisfaction with the agency houses and the growth of trade led to the establishment of a few Joint Stock banks, but all of them disappeared before the middle of the nineteenth century. In the meantime, in the absence of a reliable banking institution in the country, the Government itself began to experience certain difficulties. The outcome of all this was that in 1806 the Bank of Bengal was established by a charter of the East India Company with a capital of Rs. 50 lakhs, of which Rs. 10 lakhs was contributed by the Company's Government. The success of the Bank of Bengal led to the establishment of the Bank of Bombay in 1840 with a Capital of Rs. 52 lakhs and of the Bank of Madras in 1843 with Rs. 30 lakhs capital, the Government contributing Rs. 3 lakhs in each case. The Bank of Bombay, however, failed in 1868, and a second bank with Rs. 1 crore capital was established a few months later in its place.

Government's relations with the Presidency Banks. will be noticed that the Presidency Banks had been established by special charters and that a part of their capital had been contributed by the Government. It may also be recalled that up to the year 1862 these Banks enjoyed the right of note issue. To these facts we may now add that for a long time these banks were the only important credit institutions in the country-indeed they were designed to serve as model institutions with a view to encouraging the development of banking on sound lines in India. Moreover, they were bankers to the Government in that they were responsible for keeping its cash balances. In these circumstances some sort of Government control over the affairs of the Banks was necessary, at any rate so long as they remained in charge of Government's cash balances and the Government held a part of their stock. This control the Government exercised by nominating some directors and by appointing its own men as Secretaries and Treasurers. These arrangements remained in force till 1876 when the Presidency Banks Act was passed. By this Act the Government withdrew the whole of its contribution to the capital of the Banks and relinquished its right to nominate directors and to appoint Secretaries and Treasurers. But as these Banks were still allowed to keep and use Government balances to a certain extent as well as to manage Government's floating debt, and moreover because they still occupied a pivotal position in the Indian banking system, the Government, in order to safeguard its own interests as well as those of the general public, retained the right to audit their accounts, to call for information on various banking matters, and to require of them to publish weekly statements of their accounts. At the same time the Banks no longer enjoyed the full and unrestricted use of the cash balances of the Government. In 1876 the Government had experienced some difficulty in realizing its balances from the Banks. The result was that in that year Reserve Treasuries were established in the Presidency

towns for keeping its balances excepting small amounts which were under certain conditions to be left with the Banks. As quite a substantial part of Government's revenues was collected during the busy season when the movement of crops took place and therefore when the demand for money in the money market touched the peak, the locking up of large amounts of money (the proceeds of taxation) in Government Treasuries under the new arrangement naturally brought about great stringency in the money market. In response to popular demand some slight concessions were later on offered in the shape of lending funds on interest to the Presidency Banks. The Reserve Treasury system, however, was not abolished till 1921 when, with the formation of the Imperial Bank of India, the Government again undertook to keep all its balances with the new Bank instead of with the Central Reserve Treasuries.

Restrictions on the business of Presidency Banks. Apart from indirect Covernment control the Presidency Banks suffered from certain restrictions on their activities. were permitted to carry on without restriction only certain kinds of banking business such as the receiving of deposits, advancing money against accepted internal bills and dealing in gold and silver bullion. But they were not permitted to transact foreign exchange business and to borrow or receive deposits payable out of India. Moreover, they could not lend for more than six months, or upon mortgage, or on the security of immovable property, or upon promissory notes bearing less than two independent names, or upon goods unless the documents of title to them were deposited as security. The foreign exchange business was prohibited avowedly with the intention of preventing the Banks from embarking upon a business of speculative character; but seeing that dealing in silver is always a more hazardous occupation than dealing in foreign exchange, there seems to be a good deal of truth in the contention that this restriction was imposed in the interests of foreign exchange banks which have always had a monopoly of exchange business. There could be no justification for restrictions against borrowing from abroad except the necessity of keeping the rate of exchange

steady; but it was done regardless of the interests of Indian trade and commerce which suffered considerably in consequence of dear money.

The Imperial Bank of India. The three Presidency Banks were quite independent of each other, and, moreover, had hardly any established relations with the Indian Joint Stock and foreign Exchange banks which had gradually developed in the country since about the middle of the nineteenth century. There was thus no central credit institution in India, and this deficiency, as will be shown in the following pages, produced some grave complications and difficulties in the fields of currency, foreign exchange and credit stability. The need for a central banking institution was realized about a century ago and the problem was examined by numerous authorities including the Fowler Committee and the Chamberlain Commission. But considering the importance of the position the Presidency Banks already enjoyed in the credit organization of the country, it was found difficult to exclude them altogether from the schemes of central banking organization. It was in this atmosphere that the Government decided to establish a central credit institution, which was done by the passing of the Imperial Bank of India Act in September, 1920.

This Act contained provisions in regard to the establishment, constitution and working of the Imperial Bank of India, which, according to the Act, was formed by the amalgamation of the three Presidency Banks. The capital of the three Presidency Banks amounted to Rs. 3.75 crores, and an additional capital of Rs. 7.50 crores in shares of Rs. 500 each was authorised, of which Rs. 125 has already been called up. Thus the Imperial Bank of India started operations with a capital of Rs. 11.25 crores, of which Rs. 5.62 crores was paid up. The Reserve fund of the Bank stands at Rs. 5.35 crores at the present time, and on December 31, 1934 the Government balances stood at Rs. 6,72,19,792 and other deposits amounted to Rs. 74,27,94,823, while against these liabilities the Bank held Rs. 18,97,37,908 in cash.

Constitution and Functions of the Imperial Bank. The constitution and functions of the Imperial Bank were defined by the Act of 1920. The control of the Bank rested in the hands of a Central Board and the Local Boards at Calcutta, Bombay and Madras. The Central Board consisted (a) Managing Governors who were to be not more than two in number and who were to be appointed by the Governor General in Council. (b) the Presidents. Vice-Presidents and Secretaries of the three Local Boards, (c) the Controller of Currency, and (d) not more than four non-officials appointed by the Governor General in Council. The Local Boards were concerned more or less with routine work, while the Central Board was responsible for the Bank's policy, for fixing the Bank Rate, for the weekly publication of accounts and for control over Local Boards. The Governor General in Council either directly or indirectly through the Controller of Currency could issue instructions and direct the policy of the Bank in matters affecting the safety of Government balances or its general financial policy.

The Imperial Bank of India Act of 1920 clearly defined the functions of the new Bank, which was done more or less on the same lines as in the case of the Presidency Banks. The Bank was allowed to transact all ordinary banking business such as receiving deposits and lending (against certain specified securities) in India, drawing, accepting, discounting and selling bills of exchange payable in India and Ceylon, investing in securities of the British and Indian Governments and in certain Railway, District Board, Port Trust and Municipal Bouds. The Bank was allowed to open a branch in London, and this branch could raise funds in England on the security of the Bank's assets but was not allowed to open cash credit accounts or to receive deposits. Among its functions as a public institution. the Bank was to serve as a custodian of the cash balances of Indian public bodies but not those of the Secretary of State, and to manage the public debt in return for a fixed remuneration. As a result of the Government keeping its cash balances with the Bank, the latter had huge fiunds at its disposal with-

out interest (which appeared as public deposits in its balance sheets), but in return the Bank had to do treasury work and to maintain a number of unprofitable branches. The Bank has now 176 branches of which there were only 50 before the amalgamation of the Presidency Banks. (The Imperial Bank was required by the Act of 1920 to open at least 100 new branches in order to provide banking facilities at various places). And lastly, the Bank was required to provide adequate facilities for the transfer of funds between its branches at rates approved by the Government. As regards restrictions on the business of the Bank, they were more or less the same as those imposed in the case of the Presidency Banks. The Bank was not allowed to transact foreign exchange business in competition with the Exchange Banks. Again, it could not grant unsecured overdrafts above Rs. 1 lakhs, or grant loans or advances against immoveable property or advance loans for more than six months.

The Position of Imperial Bank in Indian Credit Organization. The position of the Imperial Bank in the credit organization of India was always an anomalous one. It had often been described as a sort of central banking institution, but even a casual examination of its functions would show that it did not perform any of the primary functions which are performed by Central Banks in other countries, i.e., the control of currency and credit. Until the establishment of the Reserve Bank in June, 1935, note issue was a monopoly of the Covernment, while the Imperial Bank was supposed to control credit. Thus there was no direct connection between currency and credit- and in the face of this drawback, and seeing that in the absence of adequate modern banking facilities entailing the inadequacy of cheque issue, credit expansion would necessitate the expansion of currency, the Imperial Bank was an ineffective agency for the control of credit. Again, unlike what we find in other countries, modern organized banks kept only a part of their reserves with the Imperial Bank, partly because they never had dealings with it on an extensive scale and partly because they could not expect much assistance from it in times of emergency. The dependence of various kinds of bankers upon their own resources as far as possible greatly weakened the control of the Imperial Bank upon the money market and rendered it impossible for the Bank to knit the various component parts of the organization into one organic whole.

The Development of Indian Joint Stock Banks. development of Indian Joint Stock banking is directly linked up with the development of India's internal trade which, in the absence of other suitable banking facilities, these banks were to finance. The first bank of this type was established in the fifties of the last century. The progress during the next half a century was slow, as we find that in the year 1900 the capital of the principal banks of this class amounted to only Rs. 82 laklis and their reserves and deposits in that year stood at Rs. 45 lakhs and Rs. 807 lakhs respectively. During the next twelve years the progress was astonishing. The number of Banks increased with startling rapidity; but these Banks were not managed and controlled by sound experienced bankers: they were in most cases floated and run by men who were at best only half educated and who had yet to learn the A, B, C of banking principles and methods. On top of all this a good few of these financiers had not much faith in honesty as the necessary ingredient of banking practice. We thus witness the spectacle of the combination of foolishness and knavery of a rare order, and not unnaturally it had disastrous consequences. Some of the new banks freely indulged in dishonest and fraudulent practices; they often carried on business of speculative character; they allowed their resources in cash to dwindle far below safety level so as to make it impossible for them to meet their liabilities in times of emergency; they offered, in order to attract deposits, such high rates of interest as could not on any account be justified. At last the Nemises overtook these banks in 1013, and the result was a gigantic crash in which, along with those which deserved that fate, some of the largest and soundly managed institutions like the Peoples Bank of India and Indian Specie Bank also disappeared. Some idea of the magnitude of the crash may be had from the fact that

the total paid up capital of the banks that failed was more than 50 per cent, of the paid up capital of all the Joint Stock Banks in 1917. This catastrophe, however, had its advantages as it resulted in weeding out for the time being some of the most undesirable elements in Indian banking. At any rate, poorly organized as some of the banking institutions were, this catastrophe could not have been avoided for long. But its scope and extent could have easily been kept under control had the Government itself and its proteges, the Presidency Banks, adopted a more sympathetic attitude towards those banks which were known to be soundly managed. As it happened, however, the Government stood aloof as a disinterested spectator (thus refusing to do its duty) while the Presidency Banks refused to grant accommodation to the banks even against guiltedged securities. The wholesale disappearance of some of the most formidable competitors must have given no little satisfaction to the Presidency Banks, so that the ultimate responsibility for a greater part of the losses consequent upon bank failures lies upon the shoulders of the Government. It is wrong to argue that it is always an unsound bank that is compelled to close its doors in a crisis; for the failure of a number of unsound banks inevitably produces a run upon sounder institutions; and as the banks lend a greater part of their deposits, no bank can possibly meet all its liabilities without some kind of extraneous assistance. That assistance can be given either by other banks which, for some reasons, are more or less immmune from the effect of a banking crisis, such as the Presidency Banks were before the war, or by a central banking institution, which did not exist in India until the middle of 1035.

The immediate result of the bank failures of 1913-14 was that the deposits in the Indian Joint Stock Banks with capital of Rs. 5 lakhs and over declined from Rs. 27.25 crores in 1912 to Rs. 17.10 crores in 1914. This setback, however, proved to be only of a temporary character as we find that in the following year the confidence of the depositor in the surviving institutions was restored, and the deposits again began to show a

tendency to increase. This progress was maintained right up to the year 1921 when the deposits with the class of banks under consideration reached the record figure of Rs. 76,80 crores. At the same time the number of banks with capiatl of Rs. 5 lakhs and over (which attract nearly 95 per cent. of Indian Joint Stock Bank deposits, the remaining 5 per cent. or so going to banks with capital of less than Rs. 5 lakhs) increased from 17 in 1914 to 27 in 1921. Since that year the number of banks has steadily increased, though their deposits have somewhat declined. In 1931 there were 33 Joint Stock Banks with capital of Rs. 5 lakhs and over, and their deposits in that year amounted to Rs. 62.23 crores. Of these banks the Big Four of India, viz., Allahabad Bank, Central Bank of India, Punjab National Bank and Bank of India account for nearly four-fifths of the entire cash reserves of Indian Joint Stock Banks, for nearly three-fourths of the total deposits and for nearly half of the total working capital of Indian Joint Stock Banks.

The working of Joint Stock Banks. It has already been shown that Indian Joint Stock Banks discount the bills drawn by indigenous bankers or shroffs, and thus finance the internal trade of the country indirectly. They generally wait for these bills to mature, but in times of emergency they also used to get them discounted from the Imperial Bank of India, and the banks on the Approved List of the Resreve Bank of India now apply for accommodation to the latter bank. They also finance trade directly, and advance loans against bullion, real property, commercial and Government securities, and grant accommodation on personal security in the form of overdrafts. Again, they provide facilities for the transference of funds at a cheap rate from one place to another. Until recently these banks concentrated their attention on internal business, but now some of the leading banks are also engaged in financing foreign trade, though the volume of their business in this line is only a small fraction of the business transacted by the Exchange Banks.

Slow progress of Indian Joint Stock Banks: its causes. In the year 1930, the latest year for which data are

available, there were 30 Joint Stock Banks with capital and reserve of Rs. 5 lakhs and over, and 54 banks with capital and reserve of Rs. 1 lakh or more but less than Rs. 5 lakhs, and the deposits in these two classes of banks totalled Rs. 63.22 crores and Rs. 4.30 crores, respectively. In that year the bank deposits in India (in the Imperial, Exchange and Joint Stock Banks together) amounted to Rs. 219.61 crores. It shows that the Joint Stock Banks have succeeded in attracting less than 30 per cent. of the total bank deposits in the country. These results of nearly three-quarters of a century of banking progress in India are obviously disheartening. This slow progress is due to a number of causes. In the first place frequent bank failures have a deterrent effect upon the depositor. Some idea of the magnitude of these failures may be had from the fact that between 1913 and 1930 no less than 244 Joint Stock Banks with a paid up capital of Rs. 7.70 crores went into liquidation. In the face of such heavy mortality among the banks the depositors have naturally turned to those banks which offer better security, such as the Imperial Bank and the various Exchange Banks. Secondly, the Government as well as other public bodies have been in the habit of regarding Indian banks with suspicion and distrust, and not unnaturally the cautious depositor prefers the banks that bear the hall-mark of safety as a result of Government patronage. Thirdly, the Imperial Bank of India and Exchange Banks having captured all the most lucrative lines of business and the Imperial Bank having the free use of enormous Government balances, the Joint Stock Banks find in them formidable rivals whom they are not in a position to meet on equal terms. Fourthly, a very large part of Indian import and export trade is in the hands of foreigners who naturally patronize their own banks, with the result that Indian banks have to be content with the remaining business.

Some drawbacks and their remedies. All things considered it seems that frequent bank failures are the prime cause of the slow progress of Joint Stock banking in India; and so long as these failures continue on the present scale, any great improvement in the banking system does not appear to be

possible. The causes of these failures at the present time are more or less the same as those of the great crash of 1013-14lack of education and training in banking methods, dishonest practices, tendency to finance long-term loans with shortterm deposits, small proportion of cash in hand to liabilities, lack of co-operation between the various component parts of the banking system, and the apathy of the Government towards Indian banking. How far some of these defects will be remedied in the future will depend upon the policy of the Reserve Bank, but unless a radical change in the situation is brought about by legislation and stricter Government control. no improvement in the situation is possible. Too much emphasis appears to have been laid by various authorities. including the Central Banking Enquiry Committee, on the provision of facilities for education in banking methods; but as banking failures in India are to a greater extent due to the ignorance and knavery of those who are ultimately responsible for the management of banks than to the ignorance of the clerical and administrative staff, the situation is not likely to improve so long as steps are not taken to clip the wings of those who are likely to mismanage banks for whose floatation and subsequent conduct they are responsible. And so long as the ideas regarding the liberty of business enterprise hold the field, it would be impossible to eliminate these undesirable adventurers. But the Government can easily make the course of incompetence and dishonesty more difficult by legislation and control with a view to clearing the path for really respectable and well managed institutions. As it is easier to float a bank with a few thousand rupees capital than a giant structure, and as it is easier for the Government to watch the activities of one large bank than to control a hundred small ones, it would be desirable to lay down by legislation that no Joint Stock Bank with paid up capital of say less than Rs. 1 crore would in future be allowed to start operations. It may be argued that action on these lines would hinder the progress of banking; but we may point out that progress in this field lies not in an increase in the number of banks but in the expan-

sion of business, and there is no reason to believe that even half a dozen of the leading Indian Joint Stock Banks would not be capable of looking after the entire banking business of the country even if it is increased ten-fold. If the Government legislates in the matter with a plan of banking development, it may be found necessary to reduce the present unwieldy number of independent institutions to more reasonable proportions by compulsory amalgamation. Needless to add that if such a course is ever adopted, the business at present done by these small bank (in competition with larger well-established banks and their branches) would be taken over by the new bank and its branches or by the existing corporations. Again, even in the case of the larger existing banks, a stricter control may be necessary. It is true that these banks are managed by men of ability and integrity; but it seems that conditions in the Indian money market at the present time are such, and temptations in the way of the banker are so many, that they are likely to disregard sound banking principles on certain occasions. The Government can exercise its control by stricter auditing, prevention of "window dressing" in balance sheets, legislative provision in regard to the minimum proportion of cash to liabilities, strict enforcement of the rule in regard to the financing of long-term loans with long-term deposits only, and the simplification of balance sheets. The ultimate object of imposing all these restrictions ought to be to eliminate completely incompetence and dishonesty from the field of banking and not to hamper the existing banks in their legitimate activities. The Reserve Bank of India, the ultimate credit authority in the country, can also give valuable assistance in this matter by demanding information from scheduled banks and by withholding credits from the less satisfactorily managed institutions; but as prevention is always better than cure, it is necessary that the Government should also take more resolute measures with a view to preventing mismanagement and the perpetration of frauds.

Foreign Exchange Banks. Just as the development of Indian Joint Stock Banks is linked up with the expansion of . India's internal trade, so the establishment and progress of foreign Exchange Banks is directly connected with the development of India's trade with foreign countries. As the Presidency Banks could not and the Joint Stock Banks would not engage themselves in foreign exchange business, the foreign exchange banks came into the field to undertake this lucrative business. In consequence of the fact that London was the clearing house of the world, and most of India's foreign trading transactions took place with or via the United Kingdom, the earlier exchange banks were British in origin and had their head offices in London. Later on when trade with other countries assumed more important dimensions, banks with head offices in those countries also came into the field and opened branches at various commercial centres in India. In 1930 there were 18 exchange banks operating in India, of which eight had their head offices in England, three in Japan, two in Holland, two in the United States, and one each in France, Portugal and Hongkong. Owing to the vastness of their resources and the monopoly of financing India's foreign trade which they enjoy, these banks have come to be regarded as a great force in India's financial organization. Of the 18 exchange banks operating in India only five do most of their business in India while others are dependent mainly upon other countries for their business 1030 the capital and reserve of all these banks amounted to £103,616,000, their deposits in India in that year amounted to Rs. 68,11,44,000, and their cash balances stood at Rs. 7,70,80,000. These figures give us an idea of the extent of their potential resources, and show that from the point of view of attracting deposits in the country, these eighteen banks are as important as all the Indian Joint Stock Banks put together.

The Business of Exchange Banks. Until comparatively recently the exchange banks confined their attention more or less exclusively to the financing of India's external trade, but during recent years they have also invaded the field of internal trade which they have begun to finance through their branches at various centres of industry and commerce. These banks

finance the external trade of India by purchasing and discounting the bills covering exports and imports. The import bills are drawn in foreign countries and are payable in India, while the export bills originate in India and are payable abroad. The export bills are of two kinds, viz., documents on acceptance and documents on payment (briefly described as D. A. and D. P., respectively), and are largely drawn at three months' sight. The documents on acceptance became immediately negotiable after acceptance while documents on payment are not negotiable: the banks after buying bills of this kind have to keep them till they mature. After buying the export bills in India. the exchange banks immediately send them to their head offices. While the D. P. bills are kept at the head offices till maturity. the D. A. bills are generally rediscounted by other English banks, and the difference between the discount rate in India and London usually constitutes the profits of the exchange banks in their dealings in these bills. Thus it will be seen that funds for the financing of India's export trade are largely provided by the London money market. But it must not be supposed that all the D. A. bills are immediately rediscounted in England. It is true that most of these bills are rediscounted immediately after they reach London, but sometimes these hills are kept in anticipation of fall in the discount rate, while on other occasions the high discount rate makes it profitable for the banks to hold these bills till maturity. Such occasions, however, are very rare. The import bills, which are negotiated in London and drawn on India, are kept in India till maturity and are seldom if ever rediscounted on account of the fact that the discout rate in India is invariably much higher than that in England.

The question at this stage arises: how do the exchange banks manage to invest vast amounts in purchasing export bills? There are four principal means of financing these purchases. In the first place they have the proceeds of import bills which became available immediately these bills mature. Secondly, they undertake remittances from India to Indians living abroad by the sale of drafts and telegraphic transfers. Thirdly,

they have in their prossession the proceeds of the sale of gold and silver bullion as well as sovereigns which they import from abroad. Lastly, when the balance of trade is in favour of India so that the three above mentioned means of obtaining funds prove to be inadequate to finance the purchase of export bills, they sell sterling bills to the Government of India. If, on the other hand, the balance of trade happens to be against India, funds from India have to be transferred to London in order to pay for the purchase of outstanding import bills. This transference is made by purchasing reverse councils from the Government of India. But even in normal times the demand for funds to finance these and other banking operations is so great that the Exchange banks allow their cash reserves to sink below what may be regarded as safety level in a country like India.* If Government control in this direction is necessary in the case of Indian Joint Stock Banks, it is equally necessary in the case of Exchange hanks.

Some Abuses and Drawbacks. There is no doubt that the Exchange banks did much to develop India's foreign trade at a time when there were no other agencies in the field to undertake its finance. But it is equally true that the capture of India's foreign trade to the extent of over 85 per cent. by foreign concerns is due to the discriminatory policy of Exchange Banks against Indian traders. Thus the ultimate effects of the operations of foreign exchange banks are far-reaching: not only the profits of financing India's external trade go to foreigners, but India also loses commission, insurance, brokerage and various incidental charges which under the present system go to foreign banking and trading

^{*} On December 31, 1930, the cash reserves of the Exchange banks doing a considerable portion of their business in India amounted to only 13 per cent. of their deposit liabilities in India while in the case of the Exchange banks doing a major portion of their business abroad they amounted to only 8 per cent. as against 12 per cent. held by Indian Joint Stock Banks.

organizations. Again, "the financing of India's imports as well as exports is by means of sterling bills, and Indian importers can do business only on D. P. terms. This is peculiar to Indian trade, and incidentally accounts for the lack of a bill market in the country. As pointed out by the Central Banking Inquiry Committee, 'for the import business of India the natural bill market in India and not outside India."* Again, it is a well-known fact that these banks offer only low-paid clerical posts to Indians while all the higher posts are earmarked for foreigners. It is obvious that there is no remedy for these evils, except the gradual elimination of these banks. The project of establishing an Iudian exchange bank has been mooted many a time, but it is difficult to see how a solitary bank would be able to bring about a change in the situation e en if it succeeds in facing the competition of such well organized and powerful institutions. Nor is the entry of the Imperial Bank of India into the field of foreign exchange likely to affect the situation in a strikingly favourable manner, because this bank also is every whit as foreign in its sympathies as any exchange bank. All things considered, the only practicable remedy appears to be direct State enterprise, and as foreign exchange business has wide ramifications in other fields, the State cannot or at any rate should not, embark upon a scheme of financing the foreign trade of the country without taking into account the requirements of the various closely related fields. In other words, a scheme for the financing of India's foreign trade by Indians themselves must be a part of the general plan of the country's economic development.

Co-operative Credit Societies and Land Mortgage Banks. We have already discussed the past history, the present position and the organization of co-operative societies and land mortgage banks in a preceding chapter, so that at this stage we may confine our attention to discussing the connection of

^{*} L. C. Jain: The Monetary Problems of India, p. 108.

these with other banking institutions in the country. The cooperative credit organization does not depend entirely upon its own resources: the provincial and central banks all over the country have established connections with the Imperial Bank of India for cash credits and overdrafts. Some idea of the value of this connection may be had from the fact that on December 31, 1928 the advances made by the Imperial Bank to co-operative banks amounted to more than Rs. 266 lakhs. But as on account of the prevailing trade depression most of the societies and consequently co-operative banks find it difficult to meet their obligations, the Imperial Bank has been compelled to withhold credit facilities to a certain extent and to insist that the societies should seek accommodation against Covernment promissory notes instead of the co-operative societies' pronotes which it now rightly regards as of doubtful value. This change of policy has brought further hardships upon the cooperative movement; but in spite of the desirability of assisting the agriculturist through co-operative movement it is not possible to expect an ordinary commercial bank to embark upon risky enterprises without some sort of guarantee from the State. But no such guarantee appears to be forthcoming. The truth is that the Indian agriculturist is too poor to help himself by co-operative effort; and as under the prevailing economic system his condition can be permanently improved only by training him to help himself, credit facilities from some outside source will be necessary, but no credit institution in the country would be willing to give the requisite amount of assistance without some sort of Government guarantee. The guarantee system would be no new thing in India; if it could be justified in the case of railway development, its justification in the case of assisting the agriculturist, on whose prosperity the wellbeing of the whole country depends, would be even greater. Provision has been made in the Reserve Bank Act to the effect that the bank shall create an Agricultural Credit Department; but how far the opening of such a department will be helpful to the co-operative movement remains to be seen.

As regards land mortgage banks, it may be said that they are more or less completely dependent upon their own resources which are too meagre to meet even a fraction of the agriculturist's requirements in the matter of funds for introducing permanent improvement, not to mention the repayment of his old debts. If the agriculturist is at all to benefit from the operations of land mortgage banks, it would be necessary for the loans to bear a low rate of interest; and as few people are able or willing to lock up their savings in long term deposits at a low rate of interest, and as permanent improvements are necessary for improving the condition of the agriculturist, State assistance in one form or another would appear to be the only solvent of the difficulties which land mortgage banks have to face at present. It would thus appear that the question of agricultural improvement through various kinds of financing agencies is in the last resort of problem of public finance.

Postal Savings Banks. The opening of Post Office Savings Banks in all parts of India dates from the year 1882, although Government Savings Banks and District Savings Banks had already been started during the 30's and 70's of the last century. The Post Office Savings Banks have, from the beginning of their career, shown life and vitality owing to the confidence they have always enjoyed (except for a short period during the war when there were withdrawals on an extensive scale). which is evident from the gradual and continuous increase in the number of depositors and the amounts deposited. 1931-32 the number of banks and deposit balance with the Government reached the record figures of 12,880 and Rs. 38.20 crores respectively, and the number of depositors stood at 2,401,527. These post office savings bank deposits constitute the unfunded debt of the Government of India, and are used for capital expenditure. The post office also attracts small savings by issuing cash certificates. These cash certificates also constitute the unfunded debt of the Government of India and, like the postal savings bank deposits, are used for capital expenditure. In 1931-32 these postal certificates accounted for Rs. 44.58 crores which gives us some idea of their popularity.

This popularity has been achieved mainly by offering a high rate of interest. Statistics published by the Government of India show that the depositors in savings banks and investors in cash certificates come mainly from the educated professional classes many of whom would deposit their savings with banks but for the higher yield and convenience. The above figures show that the banking operations of the Government deprive industry, agriculture and trade of nearly Rs. 84 crores which it can easily get by borrowing from abroad to finance its capital expenditure programme. When the Government offers a high rate of interest to the depositor, it at once begins to compete with banking institutions for securing deposits. We do not mean to suggest that the Government should forthwith call a halt to its banking activities; what we consider imperative in the interests of the economic development of the country is that the Government must not compete with banks for securing deposits by offering high returns. Even a low rate of interest will attract deposits just the same from those who find it convenient or those who are ultra cautious, while others who are attracted by high yields would naturally turn their attention to the banks.

The Reserve Bank of India. We have already seen in a previous chapter that the currency system recommended by the Hilton-Young Commission rested more or less on the establishment of a Reserve Bank in India, and that the Bill for the establishment of that bank was thrown out by the Legislative Assembly in 1928. Nothing was heard of the scheme till, in order to put currency and credit control beyond the reach of Indians, the introduction of the scheme of Reforms establishing the federal form of Government in India was made conditional upon the establishment of a Reserve Bank to take over the control of currency and credit in the country. With this end in view a new Bill to establish a Reserve Bank was rushed through the Legislative Assembly and the Council of State, and received the assent of the Governor General on March 6, 1934. The Bank started operations in April, 1935.

The Reserve Bank of India Act provided that the Bank shall be constituted for the purpose of taking over the management of currency from the Governor General in Council and for carrying on the business of banking in accordance with the provisions of the Act. The original share capital of the Bank shall be Rs. 5 crores divided into shares of Rs. 100 each, which shall be fully paid up. In order to give each part of the country its voice in the management and policy of the bank according to its own needs, the country was divided into five areas, and shares were allotted to each area according to its importance from the point of view of credit. Share registers for the five areas were to be maintained at Calcutta, Delhi, Bombay, Madras and Rangoon, and the value of the shares assigned to these centres was fixed at Rs. 140 lakhs for Bombay, Rs. 145 lakhs for Calcutta, Rs. 115 lakhs for Delhi, Rs. 70 lakhs for Madras and Rs. 30 lakhs for Rangoon.

The Act provided that the direction of the affairs of the Bank shall be entrusted to a Central Board of Directors. The Board shall consist of (a) a Governor and two Deputy Governors to be appointed by the Governor-General in Council after consideration of the recommendations made by the Board, (b) four directors to be nominated by the Governor-General in Council, (c) eight directors to be elected on behalf of the shareholders on the various registers, and (d) one Government official to be nominated by the Governor-General in Council.

The Governor and Deputy Governors shall be the executive heads and shall be eligible for re-appointment by the Governor-General in Council after the expiry of their term of office. A Local Board shall be constituted for each of the five areas, and shall consist of five members to be elected by the share-holders in that area, and not more than three members nominated by the Central Board from amongst the shareholders for that area. A Local Board shall advise the Central Board in such matters as may be generally or specifically referred to it and shall perform such duties (concerning local administration) as the Central Board may delegate to it.

Business of the Bank. The Act provides that the Reserve Bank shall be authorized to carry on and transact only certain specified business, namely:—

- (1) the accepting of money on deposit without interest from, and the collection of money for, the Secretary of State in Council, the Governor-General in Council, Local Governments, Indian States, local authorities, banks and any other persons;
- (2) the purchase, sale and rediscount of bills of exchange and promissory notes drawn on and payable in India and arising out of bona fide commercial or trade transactions;
- (3) the making of loans and advances, repayable on demand but not exceeding oo days, against the security of stocks, funds and securities (other than immovable property) against gold coin or bullion or documents of title to the same and such bills of exchange and promissory notes as are eligible for purchase or rediscount by the Bank;
- (4) the purchase from and sale to the scheduled banks of sterling in amounts not less than the equivalent of Rs. 1 lakh;
- (5) the making to the States in India, local authorities, scheduled banks and provincial co-operative banks of loans and advances repayable on demand or on the expiry of fixed periods not exceeding ninety days on the security of stocks, funds and securities, gold or silver or documents of title thereto, bills of exchange and promissory notes etc.;
- (6) the making of advances to the Governor-General in Council and to Local Governments repayable in each case not later than three months from the date of making the advance;
- (7) the purchase and sale of Government Securities of the United Kingdom maturing within 10 years of the date of purchase;
- (8) the purchase and sale of securities of the Government of India or of a Local Government of any maturity or of a local authority in British India or of certain States in India which may be specified;
- (9) the acting as agent for the Secretary of State in Council, the Governor-General in Council or any Local Government or

local authority of State in India for the purchase and sale of gold and silver, for the purchase, sale and custody of bills of exchange, securities or shares, for the collection of the proceeds, whether principal, interest or dividends, of any securities or shares, for the remittance of such proceeds by bills of exchange payable in India or elsewhere, and for the management of public debts.

Business Prohibited to the Bank. The Act provides that the Reserve Bank shall not undertake certain kinds of business, such as:—

- (1) engage in trade or otherwise have a direct interest in any commercial, industrial or other undertaking;
- (2) purchase its own shares or shares of any other bank or of any company, or grant loans upon the security of any such shares;
- (3) advance money on mortgage of, or otherwise on the security of, immovable property or documents of title relating thereto:
 - (4) draw or accept bills payable otherwise than on demand;
 - (6) allow interest on deposits or current accounts.

Central Banking Functions of the Reserve Bank. The Act provides that the Bank shall undertake to accept monies for account of the Secretary of State in Council and the Governor-General in Council and of the approved Indian States. and to carry out their exchange, remittance and other banking operations including the management of the public debt on such conditions as may be agreed upon. Again, the Bank shall have the sole right to issue bank notes in British India, and may, for a period which shall be fixed by the Governor-General in Council, issue currency notes of the Government of India supplied to it by the Governor-General in Council; and on and from the date on which this chapter comes into force, the Governor-General in Council shall not issue any currency notes. The issue of bank notes shall be conducted by the Bank in the Issue Department which shall be separated and kept wholly distinct from the Banking Department.

The Act further provides that the assets of the Issue Department shall consist of gold coin and bullion, sterling securities, rupee coin and rupee securities to such aggregate amount as is not less than the total of the liabilities of the Issue Department. Of the total amount of assets, not less than two-fifths shall consist of gold coin, gold bullion or sterling securities, provided that the amount of gold coin and gold bullion shall not at any time he less than Rs. 40 crores in value. The remainder of the assets shall be held in rupee coin. Government of India rupee securities of any maturity and such bills of exchange and promissory notes payable in British India as are eligible for purchase by the Bank, provided that the amount held in Government of India securities shall not at any time exceed one-fourth of the total amount of the assets or Rs. 50 crores, whichever amount is greater, or, with the previous sanction of the Governor-General in Council, such amount plus a sum of ten crores of rupees. The Act further provides that gold coin and gold bullion shall be valued at 8.47512 grains of fine gold per ruper, thus making the 1s. 6d. ratio a permanent affair. Again, the rupee coin shall be valued at its face value, and securities shall be valued at the market rate for the time being obtaining. Of the gold coin and gold bullion held as assets, not less than seventeentwentieths shall be held in British India, and all gold coin and gold bullion shall be held in the custody of the Bank or its agencies.

The Liabilities of the Issue Department shall be an amount equal to the total of the amount of the currency notes of the Government of India and bank notes for the time being in circulation. On the date on which the Act comes into force, the Issue Department shall take over from the Governor-General in Council the liability for all the currency notes of the Government of India for the time being in circulation, and the Governor-General in Council shall transfer to the Issue Department gold coin, gold bullion, sterling securities, rupee coin and rupee securities to such aggregate amount as is equal to the total of the amount of the liability so transferred and

in such proportion as to comply with the requirement of the

The Bank shall issue rupee coin on demand in exchange for bank notes and currency notes of the Government of India and shall issue currency notes or bank notes on demand in exchange for legal tender coin.

Obligation to Sell and Buy Sterling. The Bank shall sell to or buy from any person who makes a demand in that behalf at its office in Bombay, Calcutta, Dellii, Madras or Rangoon, sterling for immediate delivery in London at a rate not lower than 1s. 5 49/64d. and not higher than 1s. 6 3/16d. respectively, provided that no person shall be entitled to demand to buy or sell an amount of sterling less than ten thousand pounds.

Cash Reserves of Scheduled Banks. The Reserve Bank Act further provides that every bank included in the second schedule shall maintain with the Bank a balance the amount of which shall not at the close of business on any day be less than 5 per cent. of the demand liabilities and 10 per cent. of the time liabilities of such bank in India, such liabilities not to include the paid-up capital or the reserves, or any credit balance in the profits and loss account of the bank or the amount of any loan taken from the Reserve Bank. In order to qualify for inclusion in the Second Schedule a bank must have a paid-up capital and reserves of an aggregate value of not less than five lakhs of rupees.

Agricultural Credit Department. In order to put agricultural finance on a sound basis, the Act provides that the Bank shall create a special Agricultural Credit Department, the functions of which shall be (a) to maintain an expert staff to study all questions of agricultural credit and be available for consultation by the Governor-General in Council, Local Governments, provincial co-operative banks and other banking organizations, and (b) to co-ordinate the operations of the Bank in connection with agricultural credit and its relations with provincial co-operative banks and any other banks or organizations engaged in the business of agricultural credit.

Other Provisions. There are a number of other provisions in the Act concerning the administration of the bank as well as its credit policy. Those concerning credit and currency are as follows:—

- (a) The Bank shall within three years from the date on which the Act comes into force make to the Governor-General in Council a report, with proposals if it thinks fit, for legislation on matters concerning the extension of the provisions relating to scheduled banks to persons and firms engaged in British India in the business of banking, and the improvement of the machinery for dealing with agricultural finance and methods for affecting a closer connection between agricultural enterprise and the operations of the bank.
- (b) When the Bank is of opinion that the international monetary position has become sufficiently clear and stable to make it possible to determine what will be suitable as a permanent basis for the Indian monetary system and to frame permanent measures for a monetary standard it shall report its views to the Governor-General in Council.

Agreement with the Imperial Bank. It will be remembered that the Imperial Bank of India Act of 1920 had required of the Imperial Bank to perform a number of functions and had granted many valuable concessions, some of which had now to be withdrawn in consequence of the establishment of the Reserve Bank. In order to enable the Imperial Bank to cover itself against all possible losses, the Reserve Bank of India Act provided that the Bank shall enter into an agreement with the Imperial Bank which will remain in force for 15 years and thereafter subject to five years' notice on either side. This agreement is to provide that the Imperial Bank shall be the sole agent of the Reserve Bank at all places in British India where there is a branch of the Imperial Bank which was in existence at the commencement of the Reserve Bank of India Act and where there is no branch of the Banking Department

of the Reserve Bank. In consideration of the performance of the agency duties, the Reserve Bank shall pay the Imperial Bank as remuneration a sum which shall be for the first ten years during which this agreement is in force a commission calculated at 1/16 per cent. in the first 250 crores and 1/32 per cent. on the remainder of the total of the receipts and disbursements dealt with annually on account of Government, while for the remaining five years the remuneration to be paid to the Imperial Bank shall be determined on the basis of the actual cost to the Imperial Bank of India as ascertained by expert accounting investigation. Again, in consideration of the maintenance by the Imperial Bank of branches not less in number than those existing at the commencement of the Reserve Bank of India Act, the Reserve Bank of India shall, until the expiry of fifteen years, pay to the Imperial Bank Rs. o lakhs per annum during the first five years of the agreement Rs. 6 lakhs per annum during the next five years of the agreement, and Rs. 4 lakhs during the last five years of the agreement. This agreement was, however, to be conditional on the maintenance of a sound financial position by the Imperial Bank.

Defects in the Reserve Bank Act. There is no doubt that, as will be shown presently, the establishment of the Reserve Bank will in due course remove some of the existing evils in the credit organization of India: nevertheless we cannot get away from the fact that the provisions of the Reserve Bank of India Act are likely to affect in an adverse manner the usefulness of the Bank, and to perpetuate certain existing evils. The most serious drawback is the constitution of the Bank itself. India had to choose between a State bank and a shareholders' bank. The idea of a state bank was dropped manifestly on the ground that such a bank would be open to political influence and consequently would not be conducted strictly on business In a country like India with the kind of constitution she is given by the new Government of India Act such "political influence and pressure" can be exerted in more than one ways. Firstly, the State as a whole may interfere with the policy and conduct of a central banking institution. No one can deny that such interference would be necessary and in the best interests of the country as a whole: the very fact that a central bank's conduct, in fact its very existence, are determined by an Act of legislature proves that. Secondly, the central banking institution may be open to the interference of the Executive authority. Such interference would obviously be undesirable, as it may destroy the continuity of the bank's policy in regard to currency and credit. But the question arises:-Is any central banking institution in the world entirely immune from such interference? Only during recent years we have witnessed such interference on an extensive scale (in regard to the manipulation of bank rate etc.) in that home of conservative finance. viz.. Britain, as well as in every leading country in the world, and as Governments are the largest borrowers and are the custodians of the country's economic welfare, such interference from the Executive authority cannot in actual practice be altogether avoided. It may be argued that such interference has the sanction of the majority of the community behind it under a democratic constitution. If this idea of the will of the community behind executive actions be accepted, the whole objection against executive interference with the policy and operations of the Reserve Bank in India falls to ground, as the Government of India Act is supposed to give a democratic form of Government to India. But perhaps the objection against political interference is objection against the interference of the legislature and not against the interference of the Executive. Thirdly, interference with the policy of the Reserve Bank in India may come from the British Government. Such interference would obviously be most detrimental to India's interests, inspired as it would be by the unfriendly interests of the City of London. Now it will be noticed that in almost all important matters relating to the policy of the Bank, the Act gives almost arbitrary powers to the Governor-General in Council, and it is hardly necessary to point out that the Governor-General in Council is not a non-political body. On paper the control of the Bank is

vested in the Central Board, but seeing that Governor-General in Council is responsible for the appointment of the Governor and two Deputy Governors and the nomination of five directors, it becomes quite obvious that the real control of the Bank would rest in the hands of the Governor-General in Council through whom all the influences of the City of London and Whitehall would work and become responsible for moulding the policy of the Reserve Bank. In these circumstances the plea that a shareholder's bank would make the Reserve Bank immune from all kinds of political interference has no meaning: the constitution of the Bank certainly makes it impossible for the Indian Legislature to exercise control in any shape or form over the affairs of the Bank, but at the same time it exposes the Bank to the worst kind of inteference from British high finance through India Office.

Not content with handing over the control of the Bank to the Governor General in Council, the Reserve Bank of India Act makes no provision in regard to preventing the foreigners from exercising their influence over the affairs of the Bank. The charters of Central Banks all over the world prescribe that only the nationals of that country would be eligible to become the shareholders of those banks or to take part in the affairs of the banks. In other words the control of those banks is vested in the nationals of those countries. But the Reserve Bank of India Act contains no such provision, with the result that not only can non-Indians become shareholders of the Bank but they also enjoy voting power similar to that enjoyed by Indians themselves.

Another objection against the Reserve Bank of India Act is that it prescribes an agreement with the Imperial Bank of India which is manifestly one-sided. The amounts to be paid by the Reserve Bank to the Imperial Bank appear to have been fixed in an arbitrary manner, and have no relation whatever to the value of the services to be performed by the Imperial Bank. These enormous amounts will have to be earned by the Reserve Bank, which it can do only by keeping the bank rate high, and a high bank rate, especially an artificially swollen one,

is against the economic interests of the country. This agreement moreover, puts other Indian banks under a handicap. The Imperial Bank will henceforth appear as a formidable competitor against Indian Joint Stock Banks in their own field of activities, and the position of the latter will become even more difficult when, along with the prestige which the Imperial Bank already enjoys, large amounts are added to its income, without giving other banks the ghost of a chance to earn those amounts. For the performance of agency work tenders should have been called by the Reserve Bank, and thus a chance should have been given to other banks to secure a part of that lucrative business. This arrangement would have been advantageous to all concerned, including the Reserve Bank itself.

The Imperial Bank of India Amendment Act of 1934. As with the establishment of the Reserve Bank of India the Central banking functions performed by the Imperial Bank had of necessity to be transferred to the former, it was considered necessary that the latter bank should be freed from some of the restrictions which had been imposed upon its activities by the Act of 1920. Accordingly, an Amending Act was passed in March, 1934, which introduced changes of farreaching importance in the constitution and working of the Imperial Bank. Firstly, as regards the constitution of the bank. Government control over it was considerably relaxed. The Central Board now consists of (a) a Managing Director appointed by the Central Board, (b) a Deputy Managing Director appointed by the Central Board, (c) the Presidents and Vice-Presidents and Secretaries of Local Boards, (d) a representative of each Local Board elected by its members from amongst themselves, and (c) two members nominated by the Governor General in Council. The Deputy Managing Director and Secretaries of the Local Boards can attend the meetings of the Central Board but are not entitled to appoint the Managing Governors of the Bank: instead a Managing Director and a Deputy Managing Director are appointed by the Central Board. Again, the Controller of Currency is no longer an ex-officio member of the Board. Moreover, the Governor General in Council is entitled to nominate not more than two members of the Central Board instead of four as formerly. Another change which the Amending Act has introduced is that the Governor General in Council can no longer require of the Central Board to supply information regarding the affairs of the Bank and to publish a weekly statement of its assets and liabilities.

The Act of 1934 has also removed a number of restrictions on the activities of the Imperial Bank. Firstly, the bank is now entitled to open branches outside India, and various restrictions on the business of the bank at its London Office have been removed. Secondly, restrictions in regard to the nature of security demanded against loans are now relaxed, so that the bank can now lend against such securities as the shares of the Reserve Bank, municipal bonds and debentures, Indian State securities, Indian and foreign Joint Stock Company debentures, and goods which are hypothecated to the bank. Again, the old restriction in regard to the granting of loans for more than six months is removed, and now the bank is permitted to advance loans for nine months for financing agricultural operations. The new Act allows the Imperial Bank to deal in the foreign exchange business, and furthermore removes the restriction in regard to the borrowing of money in India only.

The Past and Present Organization of the Money Market in India. From the description of the various kinds of banking institutions, which has been given in the preceding pages, it will be seen that the money market in India is composed of the Reserve Bank, the Imperial Bank of India, Indian Joint Stock Banks, foreign exchange banks, private indigenous bankers and money lenders, co-operative credit organization and post office savings banks. All these various constituents of the Indian banking system have their own fields of activity, so that competition among these groups is more or less absent—except in the case of the Imperial Bank of India which has always appeared as a formidable competitor against Indian Joint Stock Banks in the field of internal trade and is

now likely to come into competition with exchange bank in the foreign exchange market. Until the establishment of the Reserve Bank (and in actual practice even now) the banking system suffered from a number of grave drawbacks-in fact it could not be called a system at all. As we have seen, the indigenous bankers and money-lenders, with all their antiquated methods and corrupt practices, flourished side by side with institutions which were exquisitely modern in their methods, and were responsible for financing a greater part of the country's economic activities. As observed by foreign experts in their evidence Banking Inquiry Committee, there existed before the two money markets in India, "the central money market and the bazaar money market (both) having their own agencies and different rates of interest without sufficient co-ordination." Even among the members of these two groups there was hardly any co-operation and effort at co-ordination. The Imperial Bank was supposed to be "a banker's bank" and as such was regarded as a co-ordinating agency, but its efforts in that direction were feeble on account of its tendencious activities, lack of sympathy towards indigenous enterprise and the divorce of currency from credit. the absence of an effective controlling and co-ordinating agency each group, or rather each bank, aspired to become as selfsufficient as possible, because it expected little assistance from other quarters in times of emergency.

We may now see how the various constituents of the Indian money market were related to each other. We can at once dismiss the Post Office Savings Banks as institutions without, for obvious reasons, having any business connection with other banking institutions. The money-lender was entirely dependent upon the indigenous banker or shroff for accommodation in times of need. The shroff in turn was mostly independent, but in the busy season a temporary connection between him and the Indian Joint Stock Banks and the Imperial Bank was established, owing to his inability to handle all his bills independently. But the assistance given by these banks to the shroffs even during the busy season may be said to have been

small covering only a small portion of the total business transacted by the latter. Needless to add, there was hardly any business connection between the shroffs and the co-operative and exchange banks. The Co-operative Banks, both Central and Provincial, went largely to the Imperial Bank for accommodation, so that they did not have much business with other types of banks. The Joint Stock Banks sometimes granted credit facilities to shroffs, and they themselves depended on the Imperial Bank for accommodation which they could expect to receive only up to a small extent—in spite of the fact that they generally kept a part of their balances with the Imperial Bank. As regards foreign exchange banks, as they preferred to keep the import bills till maturity, they were dependent entirely upon their own resources.

Consequences of lack of Organization. It is obvious that there was no fixed and settled relationship between the various constituents of the Indian money market. The natural consequence of this loose relationship and the absence of a central credit institution (the Imperial Bank could not be legitimately described as such) which could act as a co-ordinating agency was that the Imperial Bank rate (or the rate at which the bank was prepared to grant loans on Government securities) ceased to be even remotely as effective as the bank rate (which is the rate at which Central banks rediscount trade bills) in other countries. This in turn resulted in wide differences from place to place and time to time in the rates at which loans were available. The rates showed wide variations not only at different places but in the same town-indeed often in the same street. Again, as pointed out by foreign experts to the Central Banking Inquiry Committee, "the range of interest rates in India is wider than in other countries." During the busy season it was too high, and at other times there was a glut of unloanable money. These seasonable fluctuations were mainly due to the fact that currency and credit control were divorced from each other, and in a country like India where banking and cheque habits have not yet adequately developed, the expansion of currency must accompany an attempt at the expansion of

credit if the difficulties associated with a high bank rate are to be avoided. However, these seasonal increases in the bank rate to abnormal levels were detrimental to the economic interests of the country: the burden ultimately fell upon the agriculturist for financing the marketing of whose products loans were generally needed.

The Reserve Bank as a Co-ordinating Agency. With the establishment of the Reserve Bank in 1935 some of the defects in India's credit organization have already been removed. while others are expected to be removed in the near future. How far these expectations are likely to materialize is a different matter altogether. The one great advantage (which has already materialized) of the establishment of the Reserve Bank has been that currency and credit control have been unified, so that abnormal variations in the bank rate from time to time should be a thing of the past—unless of course, the bank deliberately adopts the policy of dear credit, in which case it would fail to justify its existence. With the establishment of the Reserve Bank all the scheduled banks have become dependent upon the new institution for credit facilities, and as the credit policy of the Reserve Bank is likely to be more liberal than that of the Imperial Bank, this development is likely to ease the situation in that section of the money market which is controlled by modern banking institutions. Except in these particulars the organization of Indian money market and the relationship of various kinds of banking institutions remain what they were in pre-Reserve Bank days, and which we have described in the preceding pages. Therefore, the net result of the establishment of the Reserve Bank has been that currency and credit have come under a unified control and the scheduled banks (the Joint Stock and Exchange Banks) would now be able to secure cheaper and larger loans.

But as the granting of credit facilities to Co-operative Banks would work in full blast only after the Agricultural Credit Department of the Reserve Bank has come into operation, we may say that agricultural credit has remained more or less unaffected by the establishment of the Reserve Bank. Again, as

indigenous bankers, who are largely responsible for financing the ovement of crops as well as a bulk of the internal trade of the country, have yet to be included in the Reserve Bank Schedule, from which it follows that the unification of the banking system of the country into a complex whole has yet to take place, and therefore wide variations in the rate of interest from place to place are still as current as they were before the Reserve Bank was established.

The question arises: will the Reserve Bank ever succeed in transforming the Indian money market into a closely-knit unit? It will all depend upon the relations of the Bank with the bazaar money market and the policy of indigenous bankers themselves. How many shroffs will be directly (as against indirectly through Joint Stock Banks) affected by the existence of the Reserve Bank will depend on the conditions on which they are put on the bank's schedule. Again, the policy of the shroffs in regard to the organization of their business on approved lines and their amalgamation into organized banks would also be strong determining factors. But as it would not be possible to bring all the shroffs and money lenders into the orbit of organized banking, the unification of the system appears to be a distant ideal. The direct grant of accommodation by the Reserve Bank to scheduled shroffs would affect the nonscheduled bankers and money lenders only to the extent to which they will in turn be able to get accommodation from their scheduled neighbours; but taking into account the kind of security the smaller shroffs and money-lenders, especially the latter, are in the habit of offering, it may be taken as a foregone conclusion that the cheapness of money in the organized section of the money market will be but little reflected in the other section.

Possibilities of Extending Banking Facilities. It may be argued that if it is impossible to bring the small shroff and money-lender within the field of the operations of the Reserve Bank, it may be necessary to eliminate them altogether by extending organized banking facilities, especially as such extension is likely to lead to the mobilization of the country's idle

resources. Action on these lines is certainly desirable, but unfortunately it is not a practicable proposition. We have seen that the Imperial Bank of India has to maintain a number of branches which do not pay their way. As banks are not philanthropic institutions, we must not expect them to undertake unremunerative business. In these circumstances it is not possible to eliminate the small indigenous banker and the money-lender, (though their field of operations may be gradually restricted) so that the Indian money market must of necessity remain divided for a long time into two sections, as is the case at present. Wide disparities in the rate of interest from place to place are thus inevitable, although a closer union of scheduled and non-scheduled bankers may materially reduce these differences.

The adequacy of the present credit facilities. question at this stage arises: are the present credit facilities adequate to meet all the requirements of industry and commerce in the country? Let us take the requirements of the internal trade first. The internal trade, as we have seen, is being financed by indigenous bankers (shroffs), Indian Joint Stock Banks, the Imperial Bank of India, and, to a small extent, the exchange banks. As all these bankers either already are, or will soon be, on the schedule of the Reserve Bank (thus availing themselves of cheap credit facilities), and as the ressources of these institutions comprise the entire resources of organized banks in the country, we cannot but come to the conclusion that credit facilities in so far as internal trade is concerned, are now reasonably good. But from the qualitative point of view a good deal may be said against the financing of internal trade, in consequence of the fact that the lower sections of indigenous banking are not much affected by the operations of the Reserve Bank, so that credit in this section though adequate to meet all the requirements of trade is still far from cheap. The same state of affairs prevails in the realm of foreign trade which is financed mainly by foreign exchange banks, and to a small extent by the Imperial Bank and Indian Joint Stock Banks. The machinery is extremely efficient and adequate.

but from the qualitative point of view it suffers from the overwhelming predominance of foreign banking institutions. The remedy, as we have already explained, lies in the establishment of an exchange bank by the State itself.

The adequacy of credit facilities even from quantitative point of view is confined to the field of internal and external trade, and does not extend to production. The agriculturist is still mainly dependent upon the village money-lender for the supply of credit who charges abnormally high rates of interest. The Government has provided facilities for the grant of takkavi loans in order to enable the agriculturist to undertake permanent improvements, but the grant of these loans is so small and is subject to the fulfilment of so many difficult conditions that few agriculturists ever think of availing themselves of this offer. The Co-operative Credit Societies are also doing some useful work in the direction of providing cheap credit, but compared to the magnitude of the agriculturist's requirements in connection with permanent and semi-permanent improvements as well as current expenditure, their efforts touch only the fringes of the problem of agricultural credit. Thus the money-lender is the only important source of credit supply; and owing to high interest charges, his help cannot be of any use in productive operations. Agriculture thus remains more or less completely unprovided for in the matter of cheap credit. It yet remains to be seen how far the projected Agricultural Credit Department of the Reserve Bank will go in making up this deficiency; but as the bank will proceed through co-operative credit institutions, the extension of whose activities will depend upon the improvement of the agriculturist's condition, it may be taken as a foregone conclusion that the problem of agricultural credit will not be solved through the efforts of the Reserve Bank, unless there is a considerable improvement in the condition of the agriculturist, which is not on the horizon so far.

As regards the financing of handicrafts, it may be said that the arrangements are as inadequate as in the case of agriculture. The handicraftsman is at present financed solely by the mahajan who charges high rates of interest, and besides imposes other obligations upon the worker in regard to the buying of raw materials and the sale of finished articles. Co-operative organization has hardly made its appearance among these workers, so that under the prevailing system a large part of the craftsman's profits are taken away from him in consequence of the absence of credit facilities. The salvation of handicrafts appears to lie in the organization of Co-operative Societies which may receive credit facilities from the Reserve Bank directly or indirectly. But no such move has been made by the Government or any private organization.

The problem of financing organized industries has also vet to be solved. The capital outlay is provided by sharecapital, but industrial establishments invariably experience great difficulties in satisfying their working capital requirements. These difficulties are due to the fact that there is no suitable organization in the country on which the manufacturing industries can depend. The result is that many a promising industrial establishment in the country had to close down for want of working capital. The Joint Stock Banks are the only source of accommodation at present, but seeing that manufacturing industries require loans for long terms and that the ability of ordinary commercial banks to finance these long-term loans is extremely limited, the extent to which industries can depend on Joint Stock Banks is extremely small as compared with their total requirements. The only way of overcoming these diffisulties would be to establish industrial banks; but with the one important exception of the Tata Industrial Bank (which was started in 1018 and was later amalgamated with the Central Bank of India) no systematic and conscious effort has been made to proceed on these lines with a view to meeting the requirements of organized industries. As we have already said in a preceding chapter, it is the duty of the State, in the absence of private effort, to take steps to make up such deficiencies in the country's economic organization.

From what we have said above it is obvious that the credit organization of India at the present time is in a position to meet the requirements of the country in the direction of distribution only, and even that in a manner which is far from satisfactory. The financing of production is more or less completely neglected. As we have indicated at various stages, if the solution of the problem is left to individual effort, India's agriculture, industries and even certain sections of internal trade will have to wait till doomsday before an efficient machinery for meeting all their requirements becomes available. Once again the need of State action in the entire field of credit supply is apparent; and, as in other fields of economic activity, a planned credit supply must form a part of general economic planning.

CHAPTER XXI.

PUBLIC FINANCE

The Evolution of Indian Financial System.

Financial Relations between the Central and Provincial Governments during the Pre-War Period. The history of Indian Financial organization runs parallel to the history of India's general administrative and constitutional development. During the early British period the three Presidencies, and to some extent even the smaller provinces, were more or less independent of the Central Government in administrative matters, and this independence was reflected in the field of finance also. By the Act of 1833 the Presidency Governors were shorn of the greater part of their powers in the field of legislation and administrative control, and the Governor General in Council became both in theory and practice the Eexecutive head in the country. The Act also put all financial powers in the hands of the Central authority, reducing the Provincial Governments to the position of mere spending department of the Central Government and as such subject to its control down to the minutest items. Under this arrangement the Central Government became the sole taxing authority in the country, and the various Provincial Governments received fixed amounts to meet their expenditure. Naturally enough when the income of the Provincial Governments was fixed and assured, they lost all incentive to economize or even to develop the areas under their jurisdiction. This system, in spite of all its drawbacks, remained in force till 1871 when Financial Settlements, involving the delegation of certain functions on the one hand and the allocation of certain sources of revenue on the other, were introduced by Lord Mayo's Government. The delegation of functions (which was an important step forward in the direction of the development of the constitution of the country on federal

lines), involved the transfer of such departments of local importance as Police, Public works, Medical, Education, Registration and Jails; and in order to finance these transferred activities the Provincial Governments were given the receipts in connection with the transferred departments and fixed annual grants from the Central Government. The Provincial Governments were further empowered to raise funds by local taxation in case they found their revenues from these sources inadequate to meet their requirements.

It is a noteworthy fact that the provincial settlements of 1871 made the provinces dependent upon grants from the Central Government to an undesirable extent in view of the fact that the various departmental receipts brought in but little, and all important sources of revenue were reserved by the Central Government for itself, so that the exploitation of new sources of revenue yielded little. And the grants from the Central Government were not fixed for a term of years: they varied from year to year according to the means and requirements of the Central Government itself, with the result that an element of uncertainty crept into the provincial budgets. In these circumstances it was not long before the difficulties associated with the new arrangement became obvious and called for some more enduring remedies. Moreover, it was realized that the transference of such departments as General Administration, Justice, Land Revenue, Excise and Stamps to provincial control would be conducive to greater efficiency and economy. Accordingly, in 1877 their transference was effected, and in return for these additional activities the provinces were given income from excise, stamps and law and justice. The Government of India reserved for itself the right to claim half the increase in the net yield from these sources and on its part undertook to share the deficit in the estimated yield if it ever occurred. But this arrangement was not applicable to Assam and Burma. The settlement of 1879 recognised the extraordinary needs of Burma and Assam on account of their backwardness, and gave, in addition to the revenue heads assigned to other provinces, a part of land revenue, income from forests and

export duty on salt and rice to Burina, while to Assam a part of land revenue was assigned. Thus under the new arrangement the heads of revenue came to be divided into three main classes according to whether they belonged wholly to the Central Government, or Provincial Governments, or both.

The settlements noted above were destined to function but for a few years as we find that in 1882 the annual grants to the provinces were abolished and the sources of revenue were reshuffled. Opium, salt, customs and commercial undertakings (such as railways, post-office, telegraphs and mints) were retained by the Central Government: Provincial Rates. Civil Departments, and Provincial Works were made over to the Provincial Governments; Land revenue, stamps, excise, assessed taxes, forests, registration and irrigation were to be divided between the Central and Provincial Governments. At the same time the fields of expenditure were more clearly demarcated: defence, central administration, home charges, public debt and foreign affairs were retained by the Central Government, while services of purely local importance such as law and order, sanitation and public health, education etc., were put in charge of the Provincial Governments. The settlement in regard to the allocation of the sources of revenue was to come up for revision every five years, but the quinquennial settlements during the next twenty years had the same underlying principle. This revision of settlements, accompanied as it was by the appropriation of provincial surpluses by the Central Government, made it difficult for the Provincial Governments to follow a fixed financial policy, so that in order to remove these defects, Lord Curzon's Government made the then existing settlements semi-permanent in 1904—subject to the condition that revision could be effected in times of wars, famines and other contingencies and when changes of lasting and material character took place in the factors upon which those settlements were based. These settlements were made permanent in 1912, and remained in force till the inauguration of the Reformed constitution. The position, then, between 1912 and 1919 was as follows: Central Government's sources of revenue consisted of customs, salt, opium, railways, mints, posts and telegraphs, receipts and tributes from the states, while under the heads which were assigned wholly to the provinces came forests, registration, receipts from various provincial departments (such as law and justice, education, jails etc.) and, in the case of Bengal and Bombay there was excise in addition. Again, stamps, irrigation, excise (except in the case of Bengal and Bombay which got the entire revenue under this head), income tax and land revenue were the heads which belonged both to the Central and Provincial Governments. Expenditure on these heads was undertaken by the Central or Provincial Governments according as to who enjoyed the revenue from them.

But it must not be supposed that the Provincial Governments were masters in their own house in financial matters. The Central Government exercised a very rigid control over both the revenues and expenditure of the provinces. Nor had the Provincial Governments any power to impose new taxes or to borrow funds. The result of these restrictions was that the Provincial Governments could take little initiative in matters concerning the development of their territories. And exactly the same was the consequence of the dependence of the provinces on divided heads of revenue which were subject to interference by the Central Government. There was thus constant friction between the provinces and the Centre, so that the financial arrangements before the Montagu-Chelmsford Reforms were far from satisfactory from the point of view of the provinces.

Financial Relations under the Reformed Constitution The Government of India Act of 1919 gave a semi-autonomous form of government to the Provinces, and the financial arrangements that followed separated more or less completely the finances of the Provincial Governments from those of the Central Government. Under the new arrangement the divided heads of revenue were abolished, at any rate in principle, and the Imperial (or Central) heads of revenue consisted of customs, Income tax, Salt, Opium, Railways, Posts and Telegraphs, Military Receipts and Currency and Mints, while the Provinces

were awarded Land Revenue and Irrigation, Excise, Forests, Stamps and Registration. But as under this arrangement the Government of India would have been exposed to heavy deficits, it was provided that the provinces should make fixed annual contributions to the Central Exchequer. Accordingly, in 1920 a Committee was appointed with Lord Meston as its Chairman to determine these provincial contributions for 1921-22 and the following years.

The Meston Award (or the proposals of the Meston Committee in regard to financial contributions to be made annually by the provinces to the Central Exchequer) was by no means a scientifically planned scheme: in a nutshell, it merely demanded for the use of the Central Government a part of the additional income that accrued to the provinces as a result of the new distribution of revenue heads without caring to apply the principle of equity in making those demands or taking into account the requirements of the provinces themselves under the new constitution. The Meston Committee's estimates of additional yield and their proposals in regard to initial contributions in 1921-22 and standard contributions at the end of seven years are shown in the following table.

Province.	,	Additional Income.	Initial contributions in 1921-22.	Percentage of total contribu- tion.	Standard contribu- tions after 7 years: percentage of total.
	Rs.	(Lakhs)	Rs. (Lakhs	s)	
Bengal		1,04	63	6 1	19
Bombay		93	56	$5\frac{1}{2}$	13
Madras	•••	5,76	3,48	$35\frac{1}{2}$	17
Punjab		2,89	1,75	18	9
United Provinces		3,97	2,40	24 ½	18
Burma		2,46	64	6 <u>₹</u>	6 1
Rihar & Orissa		51	nil	nil	IO
Central Provinces		52	22	2	5
Assam	•••	42	15	I ½	2 1 /2
Total	•••	1,850	9,83	100 D.C.	IOO D.C.

The scheme of standard contributions as finally adopted by the Joint Parliamentary Committee was based upon the Meston Award with the difference that all provincial contributions were uniformly reduced by ten per cent.* The calculations of the Meston Committee, however, turned out to be far too optimistic; the expected surpluses in the provincial budgets turned into heavy deficits owing chiefly to the fact that some of the provincial heads of expenditure tended to become more costly under the Reformed constitution. Again, inter-provincial jealousies once again made their appearance in an intensified form: the agricultural provinces complained that their burden was disproportionate to their means and resources while Bombay and Bengal (which are the two leading industrial provinces and therefore pay a large part of income tax) could not regard the almost complete loss of income tax revenue with equanimity. It was in these circumstances that all the provinces began to demand, as if in a chorus, the abolition of their contributions. Luckily for them, the finances of the Central Government began to register a steady improvement, so that the grant of relief became a practicable proposition. In 1925-26 permanent remissions aggregating Rs. 2.5 crores were granted to the Punjab, Madras, United Provinces and Burma, and in the following year these provinces received further remissions aggregating Rs. 1.25 In 1928-29 all provincial contributions were completely abolished.

Defects in the Existing System. But in spite of the fact that the provinces are no more under the burden of compulsory contributions, the financial position of some of them is far from satisfactory; and this unsatisfactory state of provincial finances is due to certain defects which are inherent in the financial arrangements that came into operation with the inauguration of Constitutional Reforms in 1921. In this connection we

*The Meston Committee had also proposed that in order to give the provinces some interest in the collection of income-tax on behalf of the Imperial Government 3 pies per rupee on the increase above the income from this source in the year 1920-21 should be made over to them; and this proposal was also accepted.

might profitably study the expenditure side first. The Reform Act of 1010 made the Provincial Governments responsible for justice and the maintenance of law and order as well as for such nation-building activities as agricultural and industrial development, education, public works, sanitation and medical reliefactivities that in the present state of country's moral and material development would require expenditure on an ever-increasing scale. To finance these activities the Provincial Governments have been allotted sources of revenue which are either static (like the land revenue which is the backbone of provincial finance) or are actually showing a tendency to decline as the excises are at the present time. In these circumstances it is not to be wondered at that all nation-building activities are being starved all over the country for lack of funds. As against this the Central Government is responsible only for functions of all India character, such as defence, foreign affairs, public debts, railways, posts, and telegraphs, which are either commercial (and therefore profitable) activities, or which do not at all favourably influence the material or intellectual progress of the country. The commercial activities are in normal conditions a source of profit, or at any rate are self-supporting, so that they may be left out of account. But as we shall see later on, more than three-quarters of the Central Government's expenditure is accounted for by such activities as defence, debt service, revenue collection and civil administration. These services, far from demanding growing expenditure, ought to be subject to pruning operations; and to feed them the Central Government has monopolized such growing and elastic sources of revenue as customs, income tax and salt (which are responsible for nearly 85 per cent of the Central Government's revenues). Obviously enough so long as the present distribution of revenue heads between the Centre and the provinces remains in force. the nation-building activities will continue to suffer for want of funds.

Another defect from which the present system suffers is that it tends to introduce inequalities among the provinces by subjecting them to varying degrees of burden in the matter of

Imperial revenues. Customs and income tax, which are together the mainstay of the Central Government, do not deprive all the provinces of their revenues to an equal extent, while the various revenue heads allotted to the provinces do not yield anything like an equal percentage of total provincial revenues in all cases. The inequalities thus introduced are illustrated by the fact that under the Reformed constitution the increase in the income of the various provinces has shown startling variations: on the one hand we have the Punjab whose average income during the three years ending 1932-33 showed an increase of nearly 140 per cent over the average for the last three pre-war years, and on the other extreme stands Bengal whose income has increased by only about 80 per cent during this period. The result of these inequalities has been that the efficiency of services has suffered in certain provinces, and additional expenditure on nation-building services incurred since the introduction of the Reforms shows wide variations from place to place: the agricultural provinces of Madras, the United Provinces and the Punjab showing the highest increases and the Industrial Provinces of Bengal and Bombay the lowest.

Powers of Borrowing and Levying New Taxes. In the pre-Reform days, when the finances of the provinces were subject to the control of the Central Government, the provinces did not enjoy any power to borrow directly or to levy new taxes; they could borrow only through the Central Government, and they had to be content with the sources of revenue allotted to them by the Government of India. Since the inauguration of the Montagu-Chelmsford Reforms, however, they have been given the right to borrow in the open market to finance various welldefined development schemes such as irrigation, forests, communications, reclamation etc. But even in connection with these activities the provinces cannot, even now, raise loans without the previous sanction of the Central Government, whose approval in the matter of terms on which loans are proposed to be raised as well as of provision in regard to interest and sinking fund charges has got to be obtained. Similarly, the Secretary of State's approval is necessary in the case of loans raised outside

India. These restrictions appear to have been imposed with a view to maintaining the financial stability of the provinces by preventing them from embarking upon schemes of too hazardous a character; but as the interests of an autocratic centre are likely to be diametrically opposed to the interests of pseudo-democratic provinces, especially in the economic field (and it is for their economic development that loans are to be raised by the provinces) these restrictions must adversely affect their economic development. As regards the exploitation of the new sources of taxation, certain heads were scheduled as reserved for Provincial Governments, while the residuary powers of taxation were left in the hands of the Central Government under the Reformed constitution. Under this arrangement naturally the Provincial Governments could impose a new tax falling within the schedule without the sanction of the Central Government. The provincial schedule contained taxes on land used for non-agricultural purposes, taxes on succession, taxes on various forms of betting permitted by law, and taxes on advertisements, amusements and any specified luxury. These sources of revenue, however, cannot be expected to yield much over and above the cost of collection, so that it is not to be wondered at that with the exception of Bombay, Bengal and Burma, the Provincial Governments have not cared to exploit them. The needs of the provinces are far too great and urgent to be met by the exploitation of these paltry sources of revenue: obviously nothing short of a thorough overhaul of the whole system, which takes full account of the requirements of the various governmental authorities, would meet the requirements of the situation. The various defects in the existing system have been recognized by the authors of the Reform Act of 1935; but the changes which have been proposed as a result of the realization of the existing drawbacks shall be discussed after we have acquainted ourselves with the financial condition of the Central and Provincial Governments.

Finances of the Central and Provincial Governments.

Budgetry Position in the pre-Reform Period. For a number of years before the outbreak of the Great War the Government had been enjoying substantial surpluses. Between 1000 and 1914 these surpluses aggregated nearly Rs. 60 crores. With the outbreak of war, however, the pendulum swung in the opposite direction: in 1914-15 the Government had to face a deficit of over Rs. 6 crores owing chiefly to a fall in income from the railways and customs. The provincial revenues also registered a substantial decline owing to reductions under all heads-land revenue, excise, stamps and forests. Meanwhile, the expenditure of both Central and Provincial Governments was showing a tendency to rise rapidly owing to the exigencies of the war. In 1915-16 the Government budgeted for a deficit which was not covered with new taxation on the belief that the war would come to an end before the end of the year. But as the war dragged on, the governmental expenditure increased by leaps and bounds; and to make up the deficiency the Government was compelled to resort to a heavy enhancement of taxes and a reduction of expenditure all round, except the military expenditure. The result was that the 1916-17 and 1917-18 budgets once again showed substantial surpluses. But in the following year there started once again a run of heavy deficits (for which the Afghan war of 1919, the failure of monsoon in 1920, the post-war trade depression, exchange difficulties and increase in civil and military expenditure were responsible) which lasted till 1922-23. These deficits aggregated Rs. 100 crores which were covered partly by raising new loans and partly by inflating paper currency.

Deficits during the early Reform period and the appointment of the Retrenchment Committee. The Reform Act of 1919 thus came into operation (in 1921) with a prospect of heavy deficits both for the Central and Provincial Governments. In 1921-22 the provincial budgets were separated from the Central budget, and the new provincial Governments began their

career with deficit budgets. There were three alternatives for both the Central and Provincial Governments: retrenchment. more taxation and both together. Both the Central and Provincial Governments tried to solve their financial difficulties by resorting to heavier taxation. But when the year 1921-22 ended with deficits, and when the prospects of balancing the budgets in the ensuing year by still higher taxation also vanished, the truth at last dawned upon the Government that the limits of taxation under the existing conditions had been reached and that the road to solvency lay through a drastic retrenchment. And finding itself unable to resist the claims of the various spending Departments, the Government of India appointed a Committee under the Chairmanship of Lord Inchcape to suggest means of pruning its expenditure. The Committee recommended certain cuts in expenditure on various services which were calculated to bring about a saving of nearly Rs. 19.25 crores. These cuts were as follows: Defence Services, Rs. 10.5 crores; Railways, Rs. 4.5 crores; Civil Administration, Rs. 2.19 crores; Posts and Telegraphs, Rs. 1.3 crores. These recommendations were accepted by the Government of India, but it could not see its way to cutting down its expenditure at once exactly in accordance with the Retrenchment Committee's programme. 1923-24 budget, however, contained a reduction of Rs. 11.35 crores in expenditure, of which Rs. 6.6 crores was accounted for by non-military items. These measures were expected to reduce the deficit to about Rs. 6 crores; and in order to cover this deficit and to get a small surplus with one stroke the Government doubled the salt tax from Re. 1-4-0 to Rs. 2-8-0 per maund. As regards the provinces, it may be said that they had all along been pinning their faith on the abolition of their contributions to the Central Government; but when in 1922-23 they realized that their remissions were as far off as ever, they proceeded to put their own house in order by cutting down their expenditure and imposing heavier taxation. In pursuit of this goal they were helped by trade revival as well as by the restoration of normal conditions in the political field. However, the

year 1923-24 saw the beginning of a short series of balanced budgets.

The finances of the Central Government during recent But the improvement in the finances Central Government, which began in 1923-24, was not destined to last for long. Various factors, such high exchange rate (which reduced the Central Governforeign obligations), the revival of trade, and industry and the maintenance of a high level of taxation despite a heavy fall in incomes and prices, helped to bring about surpluses during the next three years, which encouraged the Government to abolish provincial contributions. The Government of India, however, could not easily fill up the gap caused by the remission of provincial contributions; and in the year 1927-28 started a series of deficits that continued for the next five years. In 1927-28 the deficit amounted to Rs. 2.27 crores which was covered by transfers from the Revenue Reserve Fund; and in the following year there was again a deficit of Rs. 1.06 crores which was met from the same source. These small deficits can directly be attributed to the cessation of provincial contributions: the revenues of the Government had not recovered sufficiently to enable it to do without these contributions at a time when its expenditure instead of coming down was actually showing an upward tendency. In 1929-30 heavy extraordinary expenditure was undertaken in connection with broadcasting, Banking Enquiry, agricultural research, payment of higher bonuses on cash certificates, appointment of new Trade Commissioners on the Continent of Europe etc., while on the other hand contributions from the railways to the general revenues declined heavily. The result was that on the basis of the year's taxation, the year ended with a deficit of Rs. $5\frac{1}{2}$ crores.

The Covernment tried to balance its budget in the following year by showing a reduction of Rs. 80 lakhs in its military estimates, and Rs. 62 lakhs in civil estimates, and by enhancing the customs duties and income tax so as to yield an additional revenue of Rs. 5.10 crores. By these means the deficit of the preceding year was to be converted into a surplus of Rs. 86

lakhs in 1930-31. But the year 1930-31 found India in the grips of trade depression, and in consequence the yield from all the important heads of revenue, especially customs and income tax, registered a heavy decline. Moreover, expenditure increased in consequence of the civil disobedience movement. The result was that, instead of a surplus, the year ended with a deficit of Rs. 13.56 crores which the Finance Member did not propose to cover but to add to the unproductive debt. In 1931-32 the Finance Member expected an all round fall in revenues resulting in a net deficit of Rs. 17.24 crores. The expenditure on defence services was reduced by Rs. 1.75 crores, on civil administration by 98 lakhs, and thus the deficit was reduced to Rs. 14.51 crores. This the Finance Member proposed to cover by an increase in customs duties on some articles of luxury (liquors, sugar, silver bullion, betelnuts, spices and exposed cinema films) and by an all round proportionate increase in the income tax rates. But in spite of these measures the earnings of railways and revenues from customs and income tax continued to show a down-ward trend on account of the worsening of the trade depression. Expecting an enormous deficit of Rs. 19.55 crores on the year's working and Rs. 39 crores in the current and the ensuing year together, the Government came forward with a Supplementary Finance Bill in September, 1931. In order to fill up the gap it was proposed (a) to reduce expenditure by retrenchment, (b) to impose an emergency cut of 10 per cent. in salaries and (c) to impose fresh taxation. Retrenchment measures were expected to bring about a saving of Rs. 7.30 crores (Rs. 2 80 crores in civil expenditure and Rs. 4.50 crores in military expenditure) during the 18 months ending March, 1933 and salary cuts were expected to save Rs. 2.50 crores, thus bringing the total savings to Rs. 9.80 crores in 18 months. As regards new taxation proposals, the Supplementary Budget imposed a surcharge of 25 per cent, on the existing rates on all taxes with the exception of customs export duties. The surcharge on income tax was to be 121/2 per cent. for the year 1931-32 and 25 per cent. for 1932-33. Again, the income tax exemption limit was reduced from Rs. 2000 to Rs. 1000, and incomes between Rs. 1,000 and Rs. 2,000 were subjected to a tax of 4 pies per rupee. Special increases were proposed in certain cases: duty on artificial silk piece goods was increased from 20 per cent. to 40 per cent.; on artificial silk yarn from 10 per cent. to 15 per cent.; on brown sugar from Rs. 6-12-0 to Rs. 7-4-0 per cwt.; in the case of boots and shoes 20 per cent. (as before) or 4 annas per pair whichever was higher; and on camphor and electric bulbs it was increased from 20 to 40 per cent. These articles were further to be subject to a surcharge of 25 per cent. over and above the special increases in customs duties on them. Thus the Supplementary Budget brought the level of the general revenue tariff to 25 per cent. In the face of these developments the Government claimed to be justified in imposing a duty of 10 per cent. on machinery and dyes and of 1/2 anna per pound on raw cotton—articles which were hitherto free of duty. Lastly, with a view to covering the deficit in the working of the Post and Telegraph Department, the inland letter postage was increased from 1 anna to 11/2 annas and the post card rate was increased from 6 pies to 9 pies. The full effects of these retrenchment and taxation measures were not expected to be apparent till the year 1932-33, so that the year 1931-32 was expected to close with a deficit of Rs. 10.17 crores, and in the following year a surplus of Rs. 5.23 crores was expected. But these expectations were not destined to be realized: by the end of the financial year 1931-32 it became obvious that the year would close with a deficit of Rs. 13.66 crores and that the surplus for the year 1932-33 would be only Rs. 2.15 crores. The trade depression had increased in intensity, so that the estimates in regard to customs duties, especially those on sugar, cotton piece goods, silver and liquors had been vitiated on the one hand, and on the other the expected contributions from the railways were no longer forthcoming. But in spite of these discouraging results and expectations, the 1932-33 budget was based on the lines (both in regard to revenue and expenditure) laid down in the Supplementary budget of September 1931. The expectation in regard to a surplus of Rs. 2.15 crores, however, materialized but only partly, as the year actually closed with a surplus of only Rs. 1.55 crores. This was in spite of the fact that savings aggregating nearly Rs. 2 crores had been effected in interest payments as a result of conversion operations.

The budget for 1933-34 restored half the cuts in salaries, but the loss was made up to some extent by an increase in income tax owing to the removal of exemption from surcharge on the salaries of Government servants. At the same time customs returns were put at a lower figure (to the extent of Rs. 104 lakhs) owing to reduced imports of sugar (as a result of protective tariff) and cotton piece-goods. As a result of these changes it was expected that the surplus would be reduced to Rs. 42 lakhs as against Rs. 2.15 crores shown in the revised estimates for 1932-33. But as a result of providing Rs. 3 crores for debt reduction instead of Rs 6.89 crores due under the debt reduction convention, the year closed with a surplus of Rs. 129 laklis. The Government proposed to set aside this sum for earthquake relief in Bihar. The budget for 1934-35 showed that, as compared with the previous year, the Government expected a drop of Rs. 2.80 crores in revenue (chiefly as a result customs duties on sugar, machinery oΓ fall in cigarettes) and an increase of Rs. 2 lakhs in expenditure. as a surplus of Rs. 129 lakhs had been expected on the preceding year's working, it was considered necessary to find Rs. 153 lakhs in order to balance the budget. To make up the loss the Government proposed an excise duties of Re 1-5-0 per cwt on factory made sugar. This duty alone was expected to yield Rs. 1,47 lakhs. The duty on imported raw tobacco (to offset the protective effects of duty on cigarettes) and cigarettes was also enhanced, and was expected to yield Rs. 30 lakhs. The duty on silver was reduced from 71/2 annas per ounce to 5 annas and the yield was expected to improve by Rs. 4 lakhs. The export duty on raw hides was abolished resulting in a loss of Rs. 5 lakhs. By these means a net improvement in revenue of Rs. 1,60 lakhs was expected which after covering the deficiency of Rs. 1,53 lakhs was expected to leave a surplus of Rs. 16 lakhs. The budget further contained provisions for the surrender of half the jute export duty to the various jute-producing provinces, the resultant loss to the Central revenues to be made up by an excise duty of Rs. 2-4-0 per gross on matches made in British India. This was expected to increase the surplus to Rs. 19 lakhs. The Select Committee, however, altered the rate of duty according to the principle that the duty should be fixed at one rupee per gross of boxes containing on an average 40 matches, and that the boxes containing 60 and 80 matches should be subject to correspondingly higher rates. As a result of these amendments the expected surplus was reduced to Rs. 10 lakhs. The revised estimates for the year, however, put the surplus at Rs. 3.27 croics, and this improvement was principally due to an unexpected rise in customs revenue

At the end of the financial year 1934-35 the Covernment found itself with a total surplus of Rs. 3.89 crores, which was composed of Rs. 62 lakhs for 1933-34 and Rs. 3.27 crores for the current year. In his budget speech of 1935 the Finance Member announced that this surplus he intended to utilise in the following manner: Rs. 1 crore to be distributed among the provinces for rural development; Rs. 40 lakhs to be contributed to the Government of India's reserve in the Road Development Fund; Rs. 25 lakhs for schemes of development in the North-West Frontier Province, chiefly in connection with the development of roads in the tribal areas; Rs. 20 laklis for the development of broadcasting; Rs. 93 lakhs for the development of civil aviation; Rs. 36 lakhs for the transfer of the Pusa Institute to Delhi. This would leave a balance of Rs. 75 lakhs which the Government proposed to utilize in making an additional allotment for the reduction of debt.

The budget for 1935-36 put the total revenue (excluding railways) at Rs. 90.19 crores, which was Rs. 3.06 crores better than the original estimates for 1934-35, or Rs. 81 lakhs less than the revised estimates for the same year—on the assumption that no change was introduced in the basis of revenue or expenditure. Fincouraged by these figures, the Finance Member announced the abolition of 5 per cent. cut in the salaries of Government servants. On the revenue side the budget provided for (a) the reduction of duty on silver from five annas to

two annas per ounce, (b) the abolition of 5 per cent, export duty on raw skins, and (c) the reduction of income tax on incomes between Rs. 1,000 and Rs. 2,000 and of surcharge on tax on higher incomes by one third. By these means the expected surplus was to be almost completely disposed of. But the 1936-37 budget has revealed that the Finance Member was unduly cautious not only in forecasting the revenues for 1935-36 but also in presenting the revised estimates for the preceding year. The final accounts for 1934-35 have shown a surplus of Rs. 4.95 crores instead of Rs. 3.27 crores as anticipated in the revised estimates (the excess of Rs. 1.68 crores over the revised estimates being due to an increase of Rs. 1.50 crores under customs, Rs. 30 lakhs under income tax, Rs. 24 lakhs under posts and telegraphs, and Rs. 19 lakhs under currency and mint. this being partially counterbalanced by a fall of Rs. 55 lakhs in salt revenue); while the revised estimates for 1935-36 have put the surplus at Rs. 2,42 crores (after providing for an additional expenditure of Rs. 1.17 crores) instead of the originally budgeted Rs. 6 lakhs. This excess of Rs. 3.53 crores was due to improvement in sugar duty (Rs. 1.85 crores), income tax (Rs. 40 lakhs) mint, post and telegraphs and customs duties in general. The realized surplus of 1934-35 is to be utilized in the following manner: Rs. 30 lakhs for agricultural research, Rs. 10 lakhs for the Research Fund Association, Rs. 5 lakhs for assistance to cottage industries and Rs. 20 lakhs for broadcasting. The balance of the above surplus (Rs. 108 lakhs) is to be given to the Provinces on the basis of rural population for the promotion of rural uplift schemes. From the surplus of 1935-30, the newlycreated provinces of Sind and Orissa are to be given Rs. 171/2 lakhs for Government buildings, and the balance of Rs. 197 lakhs is to be put into the Revenue Reserve Fund in order to tide over the first year of provincial autonomy under the new constitution. As regards the provision for the year 1936-37, it is estimated that on the existing basis the total revenue (excluding railways) would amount to Rs. 87.35 crores and expenditure would be Rs. 85.30 crores, thus leaving a surplus of Rs. 2.05 crores. This surplus is to be distributed as follows: tax on incomes up to Rs. 2,000 to be abolished; the present surchage on income tax and supertax to be halved; the weight of one-anna letter is to be increased from half tola to one tola. The last four budgets show that the Finances of the Central Government have been put on a sound basis—in the sense that, far from retrenching, the Government can now actually increase its expenditure with impunity, and manage to take adequate funds out of the pockets of the people to meet those requirements.

Provincial Finance during recent years. The history of Provincial finance during recent years is one long narrative of deficit budgets. We have seen that in 1923-24 some of the provinces were able to show surpluses (after two years of deficits) as a result of improvement in revenues on the one hand and reduction in expenditure on the other. Thereafter both revenue and expenditure began to increase more or less equally, so that although some provinces found themselves with deficits, others managed to balance their budgets. In 1926-27, however, the tide once again turned against the provinces: Bombay, Bengal, Burma and Bihar and Orissa experienced a fall in their revenues, so that they had to face heavy deficits in spite of the partial remission of contributions to the Central Government. In 1927-28 the provincial contributions ceased and the provincial revenues improved; but although some provinces could now balance their budgets, many of them still ran into deficits. In the following year many of the provinces found their revenues reduced, while provincial expenditure on an aggregate increased by Rs. 1.41 crores. The result was that provincial deficits in that year aggregated Rs. 1.42 crores. The year 1929-30 saw the beginning of the trade depression, and the fall in prices and resulting loss of purchasing power adversely affected almost all the provincial heads of revenue, more particularly land revenue and excise, which together form the backbone of provincial finance. Tre Provincial Governments made no attempt to adjust their expenditure according to changed circumstances -as a matter of fact the estimates for 1929-30 actually showed considerable increases in expenditure—with the result that a large number of provinces had to face heavy deficits.. These

deficits became universal in 1930-31. In 1931-32 some of the measures adopted by the Central Government (such as retrenchment and temporary salary cuts) with the object of reducing expenditure were also adopted by the Provincial Governments; but as these measures were not backed by new and heavier taxation (which the provinces could not very well adopt on account of various limitations we have already noticed), their financial position improved but slowly and imperceptibly. In 1931-32 only Madras and Burma had balanced budgets: in 1932-33 all provinces excepting Bengal, Burma and Assam had balanced budget; in the following year all provinces excepting the Punjab, Madras, and Bombay ran into deficits; in 1934-35 only the Punjab and Madras had balanced budgets; and the revised estimates for 1935-36 show that not a single province has been able to pay its way. The year 1930-37 is equally gloomy: only Bombay has presented a balanced budget, and even this province would have not stood out as an exception had it not been for the separation of Sind from it. From April 1, 1936. the newly created provinces of Sind and Orissa have begun to function; but they, like the North-West Frontier Province, will be able to pay their way only with the help of subventions from the Central Government, which have been provisionally fixed for the year 1936-37 at Rs. 108 lakhs for Sind and Rs. 50 lakhs for Orissa.

Revenues of the Central Government.

Classification of Indian revenues. Government revenues may conveniently be classified, according to the nature of their source, into taxes proper, profits from commercial undertakings and charges for services rendered, income from State domain, and income from miscellaneous sources, such as tributes, fines, fees etc. Following this classification, Indian revenues may be grouped as follows:

I. Taxes—customs, income tax, land revenue, salt tax, excise, stamps, registration and opium;

- 2. Commercial undertakings—Railways, posts and telegraphs, and irrigation;
- 3. State domain—forests, land, etc.;
- 4. Miscellaneous—tributes from native states, fees, fines, etc.

Table A clearly shows the relative importance of the various sources of revenue to the Central and Provincial Governments. But the position the various sources of revenue occupy in the revenue system of India as a whole at the present time is the result of a long series of changes that have taken place in the economic organization of the country itself during the last 75 years. Before, therefore, we examine the revenue system as a whole, we must form an idea of the importance of each source of revenue to the Central and Provincial Governments and see how they have come to occupy their present position. We shall first deal with the Imperial sources of revenue.

r. Customs. Until compartively recently customs duties occupied an unimportant place in India's financial system. In the year 1900, when a 5 per cent ad valorem duty on imported goods was in operation, the gross income from this source amounted to only Rs. 4.0 crores, which accounted for a little over 5 per cent. of the total revenues of the Government. (To counteract the protection given by this duty to the Indian cotton mill industry, a countervailing excise duty of 5 per cent. was imposed on yarns of 20 counts and above produced in India). Except for the imposition of higher import duties on

TABLE A.

Central and Provincial Revenues in India in 1928-29 & 1935-36 (In thousands of Rupees).

	1928-29		1935-36 (Budgets).	
Heads of Revenue.	Central.	Provin-	Central.	Provin-
		cial.		ci a l.
Principal Heads of Revenue.				
Customs	49,28,01		51,84,00	
Taxes on Income	16,70,34	35,35	16,40,00	4,75
Salt ,	7,59,93		8,73,00	3,52
Opium	3,26,59		61,16	
Land Revenue	38,32	32,77,89	20,64	33,00,62
Excise	52,72	19,44,99	39,82	14,61,47
Stamps	30,82	13,42,23	45,25	11,96,72
Forests	25,97	5,52,72	10,75	3,33,31
Registration	1,62	1,41,78	99	1,18,18
Tributes from Indian States	74,41		75,60	
Scheduled Taxes		43,08		46,46
Total	79,08,72	73,38,00	79,49,21	64,65,33
Railways (Net Receipts)	37,48,76	2,92	32,25,45	1,99
Irrigation (net Receipts)	9,40	7,60,97	14	6,86,47
Post and Telegraphs (net				
Receipts)	7,41	•••••	70,52	
Interest (debt service)	2,80,03	2,35,35	72,56	1,99,67
Civil Administration	1,00,94	4,41,92	92,75	5,32,66
Currency and Mint	2,88,33		1,07,01	*****
Civil Works	17,05	1,08,15	23,30	2,00,26
Miscellaneous	89,47	1,89,08	56,63	1,44,32
Military Receipts	3,39,37		4,92,77	
Miscellaneous adjustment bet-	, .			
ween Central and Provincial				
Governments	2,92	2,92	•••••	2,28,32
Extraordinary Items.				
Extraordinary Receipts	30,47	75,31		1,00,26
Transfer from Re 12 Reserve				
Fund	74,15	•••••		
Total Revenue	1,28,97,02	91,48,76	1,21,00,34	96,19,28

silver bullion and kerosine oil, the general level of import duties remained at 5 per cent. till 1916-17. As regards export duties, it may be said that the general rate of 3 per cent. ad valorem which had been in operation up to 1860 was abolished in that year in order to encourage the export trade: export duties were gradually taken off, and in 1880 only the duty on rice remained on the export tariff schedule. But although the years 1900-13 witnessed no change of importance in the field of customs tariff, the income from this source increased to Rs. 11 crores (gross) by the year 1913. This increase was entirely due to the expansion of India's import trade during the period under consideration.

Since 1916 changes of far-reaching importance have taken place in the field of Indian customs tariff. These changes have been (a) gradual increase in the general level of customs duties, (b) the introduction of protective tariffs, and (c) the introduction of preferential duties. All these three changes have been inspired by different motives: the gradual increase in customs duties is the direct outcome of a sharp and heavy increase in governmental expenditure; protective tariffs on certain classes of manufactured articles have been introduced with a view to encouraging the development of certain industries; preferential duties on certain British manufactures are the upshot of trade agreements with Britain whereby mutual concessions in the matter of customs duties (as against other countries) are supposed to bring benefits to both the contracting parties. We have already discussed the progress and implications of the various preferential and protective duties in connection with imperial preference and organized industries, so that we shall now confine our attention to the subject of increase in the general level of customs duties.

In order to meet the situation created by increased expenditure during the war, the Government felt it necessary to increase its revenues, among other things, by exploiting the customs tariff. The general ad valorem duty on imports was increased in 1916 from 5 per cent. to 7½ per cent.—cotton piecegoods remaining untouched till the following year in the

interests of Laucashire. In order to balance the budgets these duties were again raised to 11 per cent. in 1921-22 and to 15 per cent, in the following year-cotton goods remaining subject to II per cent. as in the previous year. The increases introduced in 1921-22 and 1922-23 however, were of a more serious character than would appear at first sight. Goods subject to special rates of duty were so extensive and varied in character that the new tariff schedule revolutionized the whole tariff system. Goods were classified according to their character and their revenue-yielding capacities, and import duties were imposed with a heavy hand. In 1922-23 the import duty on sugar was increased to 25 per cent.; the specific duty on matches reached Rs. 1-8-0 per gross level; such luxury goods as watches, silk piecegoods, motor cars, cinema films etc., were subjected to an import duty of 30 per cent.; duties on cigarettes and cigars were raised to 75 per cent.; kerosine and petroleum were subjected to a duty of one anna per gallon and a corresponding excise duty was imposed on Indian products; duties on iron and steel were increased to 10 per cent., even such basic articles as machinery and cotton mill stores were not spared—a duty of 2½ per cent. was imposed upon them in 1921-22. The result of these increases was that while in 1917 the gross revenue from customs duties amounted to Rs. 16.5 crores, by 1920 it had gone up to Rs. 31.9 crores, and in 1924 amounted to Rs. 45 crores.

Except for the imposition of an import duty of 4 annas per ounce on silver and an increase in the duty on sugar in 1930, the tariff schedule remained more or less unaltered till 1931. In the meanwhile customs revenue had been showing an upward tendency on account of the revival of trade, and in 1929-30 reached the record figure of Rs. 51.27 crores. Thereafter a decline set in on account of trade depression. We have already seen that the 1931-32 budget introduced heavy increases in customs duties on some articles of luxury. Acting on the assumption that customs duties had not yet reached the level where diminishing returns would set in, the Government in its Supplementary Budget of September, 1931, imposed a

surcharge of 25 per cent. on all existing duties, subjecting certain luxury articles to even heavier increases, and imposing new duties on such articles as raw cotton, machinery and dyes. As we have already seen, few changes of any consequence have been introduced since the passing of Supplementary Budget (except in so far as they were necessitated by the extention of imperial preference or the grant of protection), so that the position to-day is not materially different from what it was in 1931. The increases introduced in 1931 have, however, been fruitful, as we find that customs revenues have jumped up from Rs. 46.43 in 1931-32, to the new record figure of Rs. 51.95 crores in 1932-33, and have, except in 1933-34, been maintained at that level.

As regards export duties, we have only to say that they have never been of any great importance to the Central Government. In 1916-17 an export duty of Rs. 1-8-0 per cwt. on tea and Rs. 2-3-0 per bale of 400 lbs. on jute were imposed. The duty on tea was abolished in 1927-28, while that on jute was doubled in 1917-18. In 1919 a 15 per cent. ad valorem duty was put on raw hides and skins consigned to non-Empire markets and 5 per cent. on consignments to Empire countries, but this duty was, after being reduced to 5 per cent. on a uniform scale, abolished in April 1934, in the case of hides and in April 1935, in the case of skins. The duty on rice and jute is still in force.

It is not possible to say for certain whether the peak of nevenue from customs has been reached or not; but considering the protective effects of heavy import duties, it seems that it is not far distant. As far as we can see, any further increase in import duties would react upon trade. But there is one fact which inevitably emerges from the foregoing discussion, and it is this that customs duties are now the most important of all sources of revenue in India. These duties are now responsible for more than 56 per cent. of the Central Government's revenues (exclusive of railway receipts) and form 33 per cent. of the combined revenues of the Central and Provincial Governments.

As the general level of customs duties now stands at 25 per cent., the increase in customs is giving protection to local industries to that extent. But in the absence of various other measures to develop industries this advantage is not being availed of to the fullest extent. But even from purely revenue point of view the increase in customs duties to the present level is capable of being defended on the ground that it has brought relief to the Government at a time when relief was badly needed and when other sources of revenue (excepting the income tax) promised little relief. Whether the Government, situated as it was, should have resorted to increasing the burden of taxation or to cutting down its expenditure is a different matter altogether, and will be discussed at a latter stage. But it cannot be doubted that the existing scale of customs duties offends against the principles of equity and economy. The duties on kerosine oil, metals and other articles of common use are largely paid by the masses who are too poor to pay; import duties on machinery, tools, factory equipment, raw cotton etc. retard production and so in the long run damage Government's revenue-raising capacity; export duties on raw hides and skins ultimately fell upon the collector (who could ill afford to pay), and contracted exports. On the other hand the increase in customs tariff scale as a whole cannot be said to have imposed a corresponding burden on the poor in view of the fact that the needs of the masses are few and do not extend beyond a small number of imported articles.

2. Income Tax. A tax on incomes (including agricultural incomes) was first imposed in 1859 to case the financial burden consequent upon the Mutiny, and remained in force till 1864. Two years later a license-tax on professions and trades was introduced, and was taken off in 1873. A more restricted tax on trades in certain provinces was introduced in 1877, which was merged into a general income tax by the Income Tax Act of 1886 which applied to the whole of India. By this Act all non-agricultural incomes between Rs. 500 and Rs. 2,000 were to be taxed at the rate of 4 pies in the rupee and incomes above Rs. 2,000 had to pay at the rate of 5 pies in the rupee.

In 1903 the free limit was enhanced from Rs. 500 to Rs. 1,000. In 1913-14 income tax yielded only about Rs. 3 crores. During the war when the Government was looking round for new sources of revenue, changes of far-reaching importance were introduced in the income tax schedule. To begin with, in 1916 a scale of progression was introduced which subjected larger incomes to heavier taxation. In 1917 a super-tax over and above the ordinary tax was introduced. In 1919, however, the free limit was raised from Rs. 1,000 to Rs. 2,000. But on the other hand Excess War-profits tax was imposed during the year for a period of 12 months. The scale of progression was revised and increased a number of times in respect of both ordinary and super-taxes between 1921 and 1931. The Supplementary Budget of September 1931, imposed a surcharge of 25 per cent. on the existing rates of income tax and reduced the exemption limit from Rs. 2,000 to Rs. 1,000. Incomes between Rs. 1,000 and Rs. 2,000 were to be taxed at the rate of 4 pies in the rupee. As we have seen, the 1935-36 budget reduced these surcharges and income tax on incomes between Rs. 1.000 and Rs. 2,000 by one-third, while the 1936-37 budget has provided for the reduction of the remaining surcharge by one-half, and has exempted incomes up to Rs. 2,000 from income tax. At the present time incomes between Rs. 2,000 and Rs. 5,000 on the one end and between Rs. 40,000 and Rs 1,00,000 on the other, are subject to a sliding scale of tax ranging between 6 pies and 2 annas and 1 pie in the rupee, plus a surcharge of 81/4 per cent. on these rates In the case of incomes of Rs. 1,00,000 and upwards the rate charged is 2 annas and two pies in the rupee plus the surcharge. In the case of companies and registered firms all incomes are charged at the uniform rate of two annas and two pies in the runee.

The gradual increase in the income tax rate since the war has brought this tax to the forefront as a source of revenue. In 1013, this tax yielded only Rs. 3 crores; in 1021 it reached the record figure of Rs. 25 crores. Since 1921, however, it has been on the decline an account of the disappearance of huge war-time and post-war incomes. Since 1930-31 it appears to have been

hit hard, so that in spite of the general increase in April 1931, and the imposition of surcharges, together with the lowering of exemption limit in September 1931, income tax returns have remained more or less at the same level as in the pre-depression years. This is evident from the fact that the revised estimates for 1935-36 have put the yield from this source at Rs. 16.80 crores.

But it must not be understood that income tax returns indicate the approach of maximum yield. The rate charged on higher incomes in other countries is much heavier than in India, and there is no reason why it should not be resorted to in our country, especially when the present scale offends against the principle of equity. Another great drawback of the present system of income tax assessment is that it discriminates between incomes from various sources—and discriminates on wrong principles. This is proved by the exemption of agricultural incomes from the operations of income tax.

3. Salt tax. Salt tax stands third in order from the point of view of yield to the Central Exchequer. This tax had been in force for centuries in India before the British Government resorted to it. Before 1882, the rate varied from province to province. In that year, however, it was put at a uniform rate of Rs. 2 per maund in all parts of India. Since that year it has fluctuated between Re. 1 and Rs. 2-8-0 per maund according to the requirements of the Government. Since October, 1931, the duty has stood at Rs. 1-9-0 per maund, and the estimates for 1935-36 have put the revenue from this source at Rs. 8.73 crores. Salt revenue is obtained by three different methods according to the nature of the producing agency. In the case of the salt manufactured by private agencies an excise duty is imposed; the salt produced by the Government bears excise duty as a part of its price; imported salt is subject to a customs duty equivalent to the excise duty imposed on indigenous salt.

The salt tax has been more fiercely criticised than any other tax on the ground that it is a tax on an article which is necessary for the health of both man and beast. The fact that an

increase in the tax is followed by a sharp fall in consumption, and a reduction in duty results in an increase in demand, shows that as a result of this tax the consumption of salt is being unduly restricted. The quantity of salt used for culinary purposes is so small that an increase of half an anna per seer in its price would hardly compel even the poorest to cut down its use. What is more probable is that a rise in its price in consequence of the tax compels the consumer to eliminate waste, which reacts upon demand. But there can be no manner of doubt that a rise in the price of salt would deprive cattle, horses etc. of this necessary with the result that their strength and vitality (which are already too low) would deteriorate still further, and this deterioration would react upon agricultural production which the country cannot afford. Even from the point of view of human consumers the justification of this tax may be challenged on grounds of equity. At the existing rate of duty (Re. 1-9 per maund) its burden amounts to 41/2 annas per head per annum, a greater part of which even the poorest must pay. As the consumption of salt does not even remotely correspond to an individual's income, the bulk of the burden of this tax is borne by the half starved poor of the country. When seen from this angle of view, the agitation in the country against this tax appears to be perfectly justified. The considerations of both economy and humanitarianism, therefore, demand that ways and means of abolishing this tax should immediately be found by the Government.

4. Opium The production and sale of opium are carried on under strict Government control in British India, and the Government had been deriving a large revenue from this source in the past. There are three different ways in which Government collects its revenue from opium viz., (a) the monopoly profits of the sale of the drug manufactured in state-owned factories for export purposes; (b) duty on opium sent out from Indian states, and (c) vendor's license fees. The revenues from the first two sources belong to the Central Government and come under the catagory "opium", while those from the last-named source belong to the Provincial Governments and form a part of revenue

from excise. In the case of excise opium, the Government of India sells the drug to Provincial Governments for internal consumption at cost price. Thus the exports of opium were the mainstay of the Central Government's revenue from this source.

Not very long ago, Britain was prepared to support the exports of opium to China (the largest consumer of Indian opium) with bayonets. But in 1907 British Government was forced by public opinion to conclude an agreement with China undertaking to stop the exports of Indian opium to that country within ten years. As a result of a later agreement the exports of the drug to China ceased altogether in 1914, and in consequence the revenue from this source was greatly reduced. Exports to other countries, however, continued. But in 1925 it was announced by the Government that the exports of opium from India would be gradually stopped (except for medicinal purposes) within ten years. The exports of opium thus ceased at the end of 1935, and, as declared by the Finance Member in his 1035-36 budget speech, the Government "in future shall recover only the cost of opium sold for consumption in India". But it is a strange and significant fact that while in deferenece to public opinion of the civilized world the Government of India has sacrificed nearly Rs. 7 crores in revenue by stopping the exports of opium, it has done practically nothing to check its consumption in India. However, from 1936-37 onward opium will cease to appear as a source of revenue in the Central Government's budget.

chapter the circumstances in which the Railway Budget was separated from the General Budget of the Government of India on the basis of annual contributions from the railways. At this stage we may once again point out that between 1924 and 1931 the railways contributed Rs. 41.55 crores to the general revenues, and that as a result of fall in their earnings consequent upon trade depression the railways have been running at a loss which have to be made good from the Railway Depreciation and Reserve Funds, and have necessitated the suspension of annual contributions to the general revenues. The Reserve Fund has already

been eaten up, and as the Depreciation Fund has more legitimate functions to perform than the covering of recurring deficits, it cannot be expected to last for long. The position may thus arise when the railways will have no funds of their own to make up their deficits. Obviously in a case like this the deficits will have to be met from the general revenues; from which it follows that the railways are as much a source of revenue to the Central Government as a liability. From the point of view of the general finances of the country, therefore, the separation of railway finance has no meaning at all: the element of uncertainty which this arrangement was calculated to remove is still lurking behind the scenes. However, as far as the general finances of the country are concerned, it is well to keep in mind two eventualities: a contribution from the railways averaging about Rs. 6 crores per annum or a subsidy from the general revenues towards their maintenance which may amount to anything. Since 1931-32 the railway contributions have ceased, and far from there being any sign of their reappearance the indications are that, if the present trade depression lasts much longer, the old practice of subsidizing the railways from the general revenues will have to he revived.

6. Posts and Telegraphs. Posts and Telegraphs cannot properly be described as a source of revenue to the Central Government. In 1928-29, the last normal year, the revenue from this source amounted to Rs. 7.41 lakhs; in the following year it came down to Rs. 11 lakhs; in 1930-31 there was a deficit of Rs. 60.30 lakhs ,in 1931-32 the deficit was reduced to Rs. 42.54 lakhs as a result of raising the postal charges. Since 1932-33, however, the Department has been showing surpluses: in 1932-33 there was a surplus of Rs. 39.19 lakhs; in 1933-34 it amounted to Rs. 32.44 lakhs; in 1934-35 it jumped up to Rs. 97.59 lakhs (revised estimates), and the budget estimates for 1935-36 have put the revenue at Rs. 70.52 lakhs. As a matter of general principle Posts and Telegraphs should not be turned into a profit-earning proposition; but in justice to the Government it must be said that it is not always possible so to fix the charges as just to cover the working expenses.

- 7. Tributes from Indian States. The Central Government receives nearly Rs. 90 lakhs from the States. These payments are fixed by treaties, and a part of these is paid for the maintenance of troops belonging to the Imperial Army in the states. It is not certain if these payments will be maintained under the new constitution.
- 8. Currency and Mint. The Paper Currency Department and the minting of small token coins have been a source of some profit to the Central Government. During the past seven years income from this source has averaged nearly Rs. 1.5 crores. With the transference of the paper currency control to the Reserve Bank in April, 1935, the income from this source would diminish; but the loss will be made up, to some extent at any rate, by a share in the profits of the Reserve Bank according to the provisions of the Reserve Bank Act. Besides, the profits from the coinage of token money will continue to reach the Imperial Exchequer as before.
- o. Countervailing Excise Duties. We have already traced the history of the cotton excise duty (which was finally abolished as recently as 1926) in a previous chapter. We have also examined the circumstances in which the Government of India was compelled to impose excise duties on sugar and matches in 1934-35. In 1934-35 the excise duties on sugar and matches yielded Rs. 1.15 crores and Rs. 1.38 crores respectively. while the budget estimates for 1935-36 have put the revenue at Rs. 1.50 crores from sugar and Rs. 2 crores from matches. These excise duties have been justified on the ground that both the match and sugar industries enjoyed protective duties which were far heavier than their actual requirements, and that these excise duties merely take away the additional protection which the import duties have given to the indigenous industries. However, the effects of these duties have been twofold. on the one hand they have increased the efficiency of Indian factories, while on the other they have increased the price of the articles. In so far, therefore, as these excise duties have contracted production, in consequence of a contraction in demand owing to a rise in prices, they must be regarded as having been injurious to the

economic interests of the country, and as such cannot be justified.

- 10. Interest. The income under this head is accounted for by the interest on currency reserves as well as loans granted by Central Government to the provinces, native states etc., and has averaged about Rs 2 crores during the past few years. As all the currency reserves have now been transferred to the Reserve Bank, the income from this source will show a sharp decline from 1935-36 onwards. But on the other hand as the Covernment will get the surplus profits of the Reserve Bank, the revenues of the Government will not be affected adversely by this change.
- 11. **Defence Services.** The revenue from this source has averaged nearly Rs. 5 crores a year during the past few years. It is accounted for by a number of items, the most important of which are rents from property in cantonment areas and the sale of various kinds of condemned military stores.

Provincial Revenues.

Revenue. From time immemorial the land I. Land revenue has been the mainstay of rulers in India. The British Government inherited it from its predecessors in various parts of the country, and until recent years it was the most important source of Government revenues. With the growth of trade and industry, however, its importance (though not the yield) has declined during recent years, but even now it is only second in importance to customs among the sources of revenue of the Central and Provincial Governments. As has been already pointed out, it has been handed over to the Provincial Government since the introduction of Reforms in 1921-22 The income from this source amounted to nearly Rs. 35 crores in 1923-24, and remained in the neighbourhood of that figure till 1927-28. In 1028-20 it declined to nearly Rs. 33 crores as a result of fall in the price of agricultural produce consequent upon trade depression, and, as the provincial budgets for 1935-36 show, has remained at that level up to this day. But notwithstanding this

decline it is responsible for contributing nearly 40 per cent of the provincial revenues.

The land revenue is extremely inelastic in character as it cannot be increased in times of emergency between two settlements. It has a number of serious drawbacks. Firstly, it offends against the cannon of equality of sacrifice both geographically and in relation to individuals. In the permanently settled areas its burden is much lighter than in other parts of the country. Under the system of provincial autonomy absolute geographical equality cannot be achieved, but this inequality was introduced in the days when there was only one taxing authority in the country. As this tax deprives the individual of his earnings from land on the principle of rent charges (in fact it is supposed to be, and is defended as, a rent charge), it treats smaller and larger incomes alike. Secondly, although it is supposed to be paid out of rent, it is often paid out of the earnings of the cultivator who can ill afford to pay it. In this connection it is to be remembered that land revenue is a fixed charge (for a term of years at any rate), and so is the rent regardless of the price of agricultural produce. It is thus ultimately the cultivator who suffers in consequence of the operations of land revenue in times of low prices—as is the case at present. Further. iuto account the individual's ability does not take pay, for the amount demanded is the same both times of high and low prices. The effects of these drawbacks spread far and wide into every field of rural economy; there is increase in indebtedness, and improvements in technique and equipment are neglected--in short there is distress all round. The only effective remedy appears to be the basing of land revenue as well as rents on the value of produce year after year. This arrangement would certainly present some administrative difficulties and would add to the cost of collection, but this increase in expenditure would be justified by an increase in revenue from other sources in the long run. Again, it may be argued that the proposed arrangement would make the budgetry position of the Provincial Governments somewhat uncertain; but this uncertainty, besides being capable of being mitigated

through the agency of revenue reserve funds, would not be so harmful to the country at large and to the Provincial Governments themselves as exactions in the shape of a tax that does not take into account the ability of the cultivator to hear the burden as at present.

- 2. Irrigation. The various aspects of irrigation charges have already been examined in a previous chapter. At this stage we have only to discuss the place of revenues from this source in the scheme of provincial finance. The revenue from irrigation works as a whole has yielded 6 per cent, on the capital outlay during recent years. In 1923-24 the revenue from this source (including portion of land revenue that accrued owing to the provision of irrigation facilities by the State) after deducting the working expenses amounted to Rs. 7.16 crores; in 1928-29 it stood at Rs. 7.96 crores; in 1931-32 it was Rs. 7.88 crores; and the budget estimates for 1935-36 have put it at Rs. 6.86 crores. It is not, however, known how much it amounts to after deducting the interest charges.
 - 3. Excise. The revenue under this head is derived from the manufacture or sale of liquors, opium, hemp etc., and has shown a marked tendency to show higher returns in recent In 1861-62 the revenue from this source amounted to Rs. 1.79 crores; by 1900 it had increased to Rs. 5.5 crores; it jumped up to Rs. 12.75 crores in 1913; it touched the record figure of Rs. 20.40 crores in 1929-30, and declined to Rs 16.77 crores in 1930-31 and Rs. 14.85 crores in 1931-32 partly on account of the Civil Disobedience movement and partly owing to trade depression. The budget estimates for the year 1935-36 have put the aggregate income from this source at Rs. 14.61 crores. This rapid and enormous increase in excise revenue is attributable in varying degrees to the increase in the rates of excise duties, the supression of illicit distillation, growth of population, and possibly the increase of drunkenness. In any case it shows a highly undesirable trend and, as far as we can see, both the Central and Provincial Governments have been inspired more by motives of revenue than by considerations of public welfare and morality in the handling of excise. But it

must be conceded that although the excise revenue represents tainted money, the checking of the traffic in intoxicants is by no means an easy problem. As the recent history of prohibition in the U. S. A., Sweden and other countries has proved conclusively, the goal of abstinance in the matter of intoxicants can be reached through the development of public opinion and not by legislative and fiscal actions alone. And to direct public opinion into those desirable channels both the Central and Provincial Governments have done very little indeed. However, as prohibition must be the goal of every community, the excise must be regarded as a source of revenue which is likely to shrink rather than to expand under a more progressive form of government.

- 4. Stamps. The revenue under this head is derived from two varieties of stamps, viz., judicial stamps and non-judicial or commercial stamps. Judicial stamps represent court fees and other charges in civil and criminal courts, while commercial stamps represent charges on commercial transactions involving money payments and transfers of movable and immovable property. In 1929-30, the last normal year, the revenue from this source amounted to Rs. 14.13 crores; but the advent of trade depression brought about a sharp fall, so that we find that in 1931-32 the revenue under this head amounted to only Rs. 11.97 crores. It has remained at this level ever since, seeing that the budget estimates for 1035-36 anticipate exactly the same returns. This is certainly an elastic source of revenue, but its elasticity has been over-rated: the commercial stamps are an elastic source inasmuch as the revenue from this source is likely to grow with the economic development of the country; but on the other hand as it is necessary to discourage litigation by reviving the Panchayat system and by other means, the judicial stamps can be regarded as an elastic source only in so far as it is possible to increase the yield by revising the schedule of charges.
- 5. Registration The revenue under this head is derived from the charges for the registration of documents of title deeds etc. As registration is compulsory in the case of documents of certain kinds only, the revenue from this source is by

no means large, and has averaged only about Rs. 1.25 crores a year during the last decade.

- 6. **Debt services.** The Provincial Governments also act as lenders to muncipalities, district boards, co-operative institutions, agriculturists and (to a minor extent) industrialists, but as it is the borrowed money which they lend, the revenue under the head "debt service" does not by any means indicate a net saving. However, the revenue from this source was estimated at Rs. 2 crores in 1935-36.
- 7. Scheduled Taxes. We have seen that the Provincial Governments are entitled to impose certain taxes, such as taxes on amusement, succession and certain forms of legalized gambling. It is however, only in Burma, Bombay and Bengal that these taxes have been imposed. The revenue from these sources is far from adequate as compared with the cost of collection, so that it is not to be wondered at that other provinces have not availed themselves of the opportunity of exploiting these sources. The income from this source in the three provinces has aggregated on an average Rs. 45 lakhs during the past three years
- 8. Forests. The forest revenue is derived from the sale of timber and other forest products as well as from fees for grazing etc. In 1929-30 the gross revenue from this source amounted to Rs. 6.12 crores (of which Rs. 31 lakhs belonged to the Central Government), but by 1931-32 it had come down to Rs. 4 crores on account of fall in the price of forest products. Since that year it has gone down still further, as we find that in 1935-36 (budget estimates) it is expected to amount to only Rs. 3.33 crores. But as the forests of India have yet to be scientifically developed and exploited, we may take it as certain that with a little care and attention they can be made to yield much larger revenue than they do at present.

The Burden of taxation. From what we have said in the preceding paragraphs it must have became abundantly clear that the burden of taxation in India has become more heavy with the passage of time. In the early seventies it amounted to nearly Rs. 2 per head, in early eightics it stood at Rs. 2½ per head, and in the beginning of the twentieth

century it amounted to nearly Rs. 21/2 per head. But during these thirty years prices had risen by about 30 per cent, so that this increase adversely affected only those classes whose incomes were fixed. By 1913 the per capita incidence of taxation had increased to nearly Rs. 4, but this increase was again more than offset by an increase of over 25 per cent in prices during the period. This tendency of the burden of taxation to swell has been in evidence ever since. In 1928-29, the last pre-depression year, the incidence per head stood in the neighbourhood of Rs. 5-12 in spite of a general fall in the price level as compared with the years immediately following the war. In 1035-36 the incidence of taxation (on the basis of 1931 census) amounted to nearly Rs. 5-8 as per head. Taking into account the fact that prices in India in 1935-36 were nearly 20 per cent below the pre-war prices, the real burden of taxation has increased by nearly 50 per cent. This increase in burden would be justified only if it could be proved that the per capita income has increased to a corresponding extent, which of course is by no means a fact.

It is not possible to form an accurate estimate of income per head, but (considering the fall in prices) at the present time it stands somewhere in the neighbourhood of Rs. 50. It means that taxation deprives the individual of nearly 11 per cent of his income. It is certainly true that this per centage is small as compared with that in various prosperous countries like the United States and Britain, but the real sacrifice involved by this burden, (when income per head is small) is much greater than that involved in the payment of a higher per centage of much larger incomes. From the point of view of real sacrifice the Indian is probably the most heavily taxed citizen in the world. Hence the demand that the burden of taxaton should be lightened.

Drawbacks of the taxation system. The past history and the present position of the various sources of revenue in India, as outlined in the preceding pages, would show that the present system of taxation has not been designed or planned, but is the product of a series of haphazard arrangements and improvisations, calculated to enable the Government to cope with certain situations with which it had found itself confronted. The Government had all through one object in view, namely, the collection of revenue regardless of who paid it, how it was paid, and how these payments affected production and distribution. In other words, Government has concentrated its attention upon productivity and convenience in shaping their taxation system, and in doing that have paid scant respect to the principles of economy, equality and justice.

As nearly 80 per cent of the revenues of the Central and Provincial Governments (excluding the net earnings of the railways) are derived from customs, income tax, salt, land, excise and stamps, we may concentrate our attention upon these sources in discussing the taxation system as a whole. To take customs first, it will be noticed that the present system pays little consideration to the articles which are consumed by the poorest classes in the country, such as kerosine oil, dyes and metals, and to various articles of basic importance such as machinery, mill stores, lubricants etc. which are consumed in large quantities by manufacturing industries. The result of this lack of discrimination is that a substantial part of customs duties is paid by those who are least able to contribute anything, and by manufacturing industries generally which in consequence operate under a heavy handicap. The system thus offends against the canons of equity and economy. As regards income tax, the chief objections against it are that it is not steep enough and that it makes no distinction between earned and unearned incomes. The smaller incomes are certainly not taxed too heavily, but the larger incomes are let off too lightly: in other words it involves inequality of sacrifice Salt tax is open to the same objection, in addition to the charge that it subjects the poorest in the country to the burden of taxation and that it disregards the principle of economy by deteriorating agricultural production through adversely affecting the livestock. The land revenue apart from showing wide variations from place to place (permanently settled as against temporarily settled areas) subjects all agricultural land to a uniform burden in

proportion to its productive capacity regardless of the total income of the landlord, and as such pays no heed to the principle of equality of sacrifice, especially as larger agricultural incomes are not subject to the operations of income tax either. The excise revenue, in so far as it is dependent upon, and seeks to perpetuate, lack of public morality, cannot be justified on moral grounds. As regards stamps, in view of the fact that they are levied on a moderate scale, it would be unfair to say that they are in restraint of trade or make litigation expensive: in fact they are the only important source of revenue which does not violate against any of the generally accepted principles of taxation. But in spite of this bright spot, the taxation system as a whole remains inequitous. Moreover, in imposing the present system of taxation no attempt is made to study its effects on production as a whole. Even from the point of view of the interests of the taxing authorities themselves the system is unsatisfactory inasmuch as it renders their budgetry position extremely uncertain. The tax-raising capacity of the Central and Provincial Governments is obviously dependent upon agricultural prosperity, and the Indian revenue system provides no arrangement for meeting various exigencies consequent upon variations in agricultural production which are brought about by the uncertainties of rainfall.

Public Expenditure,

Growth of Public Expenditure. We have already seen that revenue in India has nearly doubled since the war. This increase has been due to an enormous multiplication of demands of the various existing Government departments and to the extension of Government activities in certain fields since the war. For purposes of analytical study, public expenditure may be grouped under three main heads: military services, debt services and civil administration. Expenditure under all these heads (both Central and Provincial) has gone up since the

war, but in different proportions, as is shown by the following figures:—

		1913-14.	1935-36 (Budget estimates).	
•		Rs.	Rs.	
Military services		31.4 crores.	49.91 crores.	
Debt services		15.2 ,,	51 ,,	
Civil administration	•••	31.65 ,,	61.69 ,,	

The increase in military expenditure needs no explanation: it is due to the strengthening of military forces for Indian as well as Imperial purposes, and to the higher cost of modern equipment. The enormous increase in debt services (both Central and Provincial) is accounted for by the increase of unproductive debt and the gift of Rs. 100 crores to the British Government during the war. Again, productive debt has also enormously increased since the war owing to the acquisition and extension of railways. The increase in expenditure on civil administration is accounted for partly by the extension of governmental activities in such fields as agriculture, industries, aviation, scientific departments, education, medical, public health, etc., and partly by heavier expenditure on general administration, justice, police, jails, etc.

Expenditure on various services: their relative position. In the year 1935-36 the Central and Provincial budget estimates put the expenditure at nearly Rs. 210 crores. Of this Rs. 49.91 crores was swallowed up by Defence services, Rs. 51 crores was taken over by Debt services, and Rs. 12.70 crores was accounted for by direct demands on revenue (the collection of revenues). Against these there was the expenditure on the various nation-building activities in the following order: education Rs. 12 crores; medical Rs. 4 crores; public health Rs. 1.75 crores; agriculture Rs. 2.50 crores; industries Rs. 90 lakhs. The balance (nearly Rs. 70 crores) was accounted for by expenditure on police, justice, jails, audit, civil works, currency and mint, political services and a number of miscellaneous items.

Criticism of Public Expenditure. The above figures are eloquent enough and hardly need any comment or criticism: they show that only Rs. 22 crores (after making an allowance for the earnings of and expenditure on railways) or about 12 per cent, of the country's revenues are being spent on nationbuilding activities, while the remaining 88 per cent. are being spent with a view to enabling the governmental machinery to go on smoothly. This, to say the least. reveals a scandalous state of affairs for which parallel is to be found in any civilized country in the world. The apologists of this policy argue that heavy military expenditure is inevitable if the country is to be kept safe from external aggression; that the Government must make provision for interest charges on loans which have been contracted in India's interests; that administrative machinery must be kept in a state of efficiency, and efficiency involves high expenditure. They proceed to argue that if after meeting this expenditure, which is necessary for the existence of the State. little is left for other services they must be content with that little. Against these one-sided arguments it may be pointed out that expenditure in any particular direction can be justified only up to a certain limit, which is indicated by the balancing of the disadvantage or loss of depriving the community of a part of its earnings in the shape of taxation, and the advantage of spending the proceeds of taxation on the maintenance of various services. Again, it is necessary to divide income between various services in such a manner as to ensure as far as possible equal marginal returns on all forms of expenditure. When we apply these principles to India, we find that the present level of expenditure on various services cannot be justified. As a result of expenditure on defence services India undoubtedly gains a material advantage, but whether the net aggregate gain would not be greater if a part of this expenditure was devoted to various nation-building activities, does not admit of any reasonable doubt. In pronouncing a judgment on this question, due regard must be paid to the fact that the maintenance of the present military strength is the result of the "forward" policy of the

Government on the Frontier, and that it is possible to reduce substantially expenditure on defence by eliminating British troops and officers without endangering the efficiency of defence forces as a whole. Moreover, the maintenance of the present strength is not necessary inasmuch as it is inspired by Imperial requirements and by the internal policy of the Government. At all events it seems certain that even from the military point of view India would not be a loser if expenditure on defence services was drastically cut down, and would be a gainer if the savings made thereby were spent on such services as would directly stimulate the material and moral development of the country. The interest charges, which account for nearly 25 per cent. of governmental expenditure, are in a different catagory altogether. Nearly three-quarters of this expenditure is due to obligations in connection with railways, irrigation works, hydro-electric works, etc. and as such is not open to criticism. But a substantial part of the balance is due to borrowings which, strictly speaking, have been contracted in Imperial interests and therefore should be a charge upon the Empire and not upon India. Anyhow, India is not in a position to reduce expenditure in this connection. But civil expenditure and expenditure on various miscellaneous items as a whole stands on a different footing. The expenditure in these fields has reached these enormous proportions because higher officials are being paid such high remunerations as are not paid even in prosperous countries like Britain, Germany, Japan and others. If their remunerations were cut down to the extent demanded by the general economic condition in the country, enormous savings would clearly result. The efficiency of the services would hardly suffer, but any possible loss to the country in this respect would be many times covered by the savings and consequent higher expenditure on various nation-building services.

The Public Debt in India: a Historical Survey. We have seen that Rs. 51 crores, or nearly 25 per cent. of the total expenditure of the Central and Provincial Governments, is accounted for by debt charges. The debts on which these heavy charges are annually payable, have been contracted either for

such unproductive purposes as the waging of wars against other countries, or for making gifts to the British Government as well as the suppression of revolts against the Government, or for such productive purposes as the construction of railways, irrigation works, etc. These debts, again, have been contracted partly in Britain and partly in India.

The public debts in India originated in the East India Company's wars of conquest. In other words, India was made to pay for the blessing of being conquered by Britain. By 1856-57 the political debts of the East India Company had amounted to £60 million. Then came the Great Rebellion of 1857, and India had to bear the whole cost of reconquest. By 1860 the public debt exceeded the £100 million level—the increase being accounted for partly by the cost of suppressing the revolt and partly by the Government of the Crown undertaking the redemption of the £12 million stock of the East India Company. Thus it would appear that till 1860 the entire interest bearing obligations of the Government of India were unproductive in character and were contracted in pursuit of British interests.

But with the development of public works, such as railways and irrigation works, during the sixties of the last century, productive debts began to be contracted by the Government of India. So urgent was the necessity of developing these productive works that from 1880 onwards the Government embarked upon the policy of devoting its surplus revenues (whenever such surpluses were available) to the construction of productive works, and writing off the unproductive debt to the corresponding extent and crediting it to the productive debt. By these means the Government intended to remove the burden of its unproductive obligations, or rather to convert them into productive ones. The result of this policy was that, as shown in the accompanying table, by March, 1914, the unproductive debt was

The Interest-bearing obligations and interest-yielding assets of the Government of India at the close of the financial years 1913-14 and 1934-35.

and 193 4-3 5.		
	March 31, 1914.	March 31, 1935.
Interest-bearing Obligations.		
In India—	In crores	of Rupees.
Rupee Loans	145-69	438-28
Treasury Bills in the hands of the public Treasury Bills in the Paper Currency Reserve	•••	22·00 27·50
Other obligations—		
Post Office Savings Bank Deposits	23·17	59.33
Cash Certificates	 10·39	66·49 88·36
Provident Funds, etc	10.39	88°30 14°83
Depreciation and Reserve Funds Provincial Balances		5 59
Total Loans	145-69	487·78
Total other obligations	34.10	234-60
Total in India	179-79	722-38
In England—	In millions	of pounds.
Sterling Loans	177-06	323.57
Unpaid balance of India's War Contribution		16.72
Capital value of liabilities undergoing redemp-		
tion by way of terminable Railway annuities	70-60	43-58
Provident Fund, etc		1.15
	• • • • • • • • • • • • • • • • • • • •	
Total in England	147-66	385.02
	In crores	of Rupees.
Equivalent at 1s. 4d. to the rupee in 1914 and		E12 20
at 1s. 6d. in 1935	371-05	513-36
Total interest-bearing obligations	551·29	1,235.74
Tourist and a series and a series		
Interest-viriding Assets.		
Capital advanced to Railways	438-64	756-84
Capital advanced to other commercial departments	= 4 AA	23.71
Capital advanced to Provinces	71-09	179-22
Capital advanced to Indian States and other		
interest-bearing loans	•••	21.26
Total interest-yielding assets	524.71	981-03
A 1 1 111 4 11 11 1 1 1 1 1 1 1 1 1 1 1		
Cash, bullion and securities held on Treasury		## FO
account		51.52
Release of total interest-begging obligations and		
Balance of total interest-bearing obligations not covered by above assets	26.58	203-19
covered by above assets	20 30	200 10

reduced to nearly Rs. 261/2 crores, while the total interestbearing obligations had increased to Rs. 551,20 crores. But all these obligations are not accounted for by rupee and sterling loans: Post Office Savings Bank deposits and Provident Funds (which were of course invested by the Government of India) had come into existence, and terminable railway annuities had been created. However, it is satisfactory to find that, as shown in the table above, out of the total interest-bearing obligations of Rs. 551.29 crores, no less an amount than Rs. 438.64 crores represents capital advanced to railways, while the advances to the Provincial Governments (chiefly for productive purposes) and various commercial departments amount to Rs. 71.99 crores and Rs. 14.08 crores respectively. The table above also shows that while obligations incurred in India before the outbreak of war amounted to only Rs. 179.79 crores, those contracted in England amounted to Rs. 247.66 crores. Although the Government has defended its partiality for the London money market by pointing out the enormous difference between the rate of interest in India and England (which is a perfectly acceptable explanation from the point of view of public finance), we may go a step further and say that this neglect of the Indian money market was ultimately in the interests of India - notwithstanding the fact that the Government had not the slightest intention of helping India. In examining the desirability of raising loans abroad in preference to India we must remember the fact that the development of the economic resources of India has been, and is, being retarded by the comparative scarcity of capital in the country. If the Government had met all its capital requirements by raising loans in India. the industries, agriculture and trade of the country would have suffered for want of capital, which would have been a very undesirable development. From this point of view Government's resort to the London money market has been a blessing in disguise.

The growth of Public Debt during and since the war. During the war governmental expenditure went up, and was met partly by raising a series of war-loans. Again, we have

seen that in order to get over its currency embarrassments occasioned by the piling up of favourable trade balances during the war (which it could not otherwise liquidate), the Government resorted to making a contribution of £100 million towards the expenses of war to the Imperial Government. And lastly, as we have seen, there were heavy budgetry deficits during the early post-war period. The result of all this has been that on March 31, 1935, the balance of total interest-bearing obligations not covered by interest-yielding assets amounted to over Rs. 203 crores. The total interest-bearing obligations of the Covernment of India amounted to Rs. 1,235.74 crores in 1035 as against Rs. 551.20 crores in 1014—an increase of more than 110 per cent. As shown in the table above, this enormous increase is brought about by increases under all the old heads of interest-hearing obligations as well as the introduction of new ones like cash certificates, treasury bills, unpaid war contributions, etc. As against this increase in interest-bearing obligation we have also an increase in the value of interest-bearing assets: the acquisition of railway lines and advances to the Provinces and Native States (for productive purpose and for covering budgetry deficits) have pushed the total under these heads to Rs. 981 crores. Another remarkable feature of postwar developments in the field of public debts is that the Government of India have contracted a major portion of their obligations in India itself, and the result of this policy has been that the rupee obligations of the Government now far exceed its sterling obligations.

Debt Service: India's Responsibility. One of the most controversial questions which has been discussed with a great deal of heat during recent years is: Have all these loans and other obligations been contracted by the Government in India's interests, and is India morally bound to respect these obligations? The answer would depend upon the nature of the use of borrowed funds. India is morally bound to respect these obligations contracted on her behalf by the Government, but only to the extent the borrowed funds have been used demonstrably in India's own interests. There can

be no doubt that the interest-yielding assets represent to an overwhelming extent the expenditure of borrowed funds in a manner conducive to India's well-being, so that the responsibility of India to the extent of the value of these assets is clear. But it is argued that expenditure on commercial undertakings has been excessive, so that before India accepts her responsibility, some big slices will have to be taken off the face value of these assets. On the other hand the debts which have been contracted for suppressing revolts and waging wars against other countries with whom India had no quarrel come under a different category. Most of these wars were waged in pursuance of the imperialistic aims of England, so that the expenditure incurred in connection therewith ought to be a charge upon the British Covernment, and not India. As we are confident that any impartial tribunal would put a major part of this burden upon the shoulders of Britain, India's responsibility in regard thereto ceases accordingly. Justice and goodwill demand that Britain should release India of this portion of her financial burden.

Arrangements for the Redemption of Debt. We have seen that from the eighties of the last century onward the Government utilized its budgetry surpluses for capital expenditure on commercial undertakings, thereby reducing the unproductive debt to that extent. Again, it was arranged to liquidate liabilities incurred in connection with the purchase of certain railways by the issue of annuities in payment of both principal and interest. As, however, most of the debt of the Government of India before the war belonged to the productive class, and, moreover, as the Government was piling up its liabilities in connection with commercial undertakings, no systematic effort was made to repay old debts.

It was in 1917 that a sinking fund was created in connection with the war-loan of that year. Later on the Government began to set aside £500,000 annually in connection with the payment of a portion of the war contribution. All these were haphazard measures, and it was not till 1924 that the Government produced a definite scheme for the redemption of debt.

Under this scheme the Government proposed to set aside Rs. 4 crores annually and in addition "r/80th of the excess of the debt outstanding at the end of each year over that outstanding on 31st March 1923."* The contributions from the general revenues were to be made on the old pre-war principle of undertaking new capital expenditure from the general revenues and thereby extinguishing the unproductive part of the debt. The 1935-36 budget provided for a contribution of Rs. 305 lakhs towards the reduction or avoidance of debt.

Finance under the New Constitution.

Re-allocation of the Sources of Revenue. The defective distribution of the sources of fevenue between the centre and the provinces, which we have already discussed at length, was adversely commented upon even by the Simon Commission, so that the constitution makers at the Round Table Conference were forced to realize the necessity of re-adjustment on a more equitable basis. The problem was examined in all its details by various Committees set up by the Conference, and certain broad principles were laid down by them for the guidance of the Federal Structure Committee and the Round Table Conference. The provincial deficits during the past decade and the prospect of heavier expenditure under the new constitution forced the Round Tablers and their Committees to realize the necessity of allocating some additional revenues to the provinces in order to enable the so-called provincial autonomy to function. But as on the one hand the Federal Government could not cut down its requirements (which it could do only by cutting down its military expenditure), while on the other a substantial increase in provincial expenditure under the new constitution seemed certain, the Committees found themselves facing the unenviable task of pleasing two masters. This they endeavoured to achieve by looking round for some new sources of revenue. But, as we shall see

[•] India's Parliament, Vol. X, p. 275. Quoted by Jathar and Beri, Indian Reconomics, Vol. II, p. 528.

presently, their search in this direction did not yield any fruitful results. But as provincial autonomy is supposed to be the pivot of the new constitution, it was considered inadvisable to mar the prospects of its successful working by providing material for financial bungling in the provinces, so that there was now no alternative but to force the Central Government to part with some of its present revenues.

The taxes on income were all that could be transferred with safety to the provinces without seriously impairing the financial position of the Federal Government; and consequently it was suggested that a percentage of the share of income tax attributable to each province should be transferred to it. But as the transference of the proceeds of this tax was expected to leave some of the provinces in deficit, it was suggested that the charge should be spread over other provinces by giving them a smaller share of income tax than they were entitled to. These initial percentages were to be fixed after a special review of Indian finances at the time of the establishment of the Federation. Along with the allocation of a part of income tax, other means of putting the finances of the provinces on a sound basis were also to be explored. In 1935 Sir Otto Niemeyer was deputed to conduct the necessary inquiries, and his report was published in April. 1036.

Sir Otto Niemeyer proposed immediate financial assistance to the provinces from the time of the introduction of provincial autonomy. This assistance is to take three forms: (a) cash subventions, (b) cancellation of net debt incurred previous to April, 1936, and (c) distribution to the jute-growing provinces a further 12½ per cent. of duty on jute.

The annual cash subventions proposed by Sir Otto Niemeyer are as follows:—United Provinces: Rs. 25 lakhs for 5 years; Assam: Rs. 30 lakhs; Orissa: Rs. 40 lakhs; N. W. F. Province: Rs. 1 crore (subject to reconsideration after 5 years); Sind: Rs. 105 lakhs to be reduced by stages after 10 years. The total annual relief to be given to the provinces by various means works out at Rs. 75 lakhs in the

case of Bengal; Rs. 25 lakhs in the case of Bihar; Rs. 15 lakhs in the case of the Central Provinces; Rs. 45 lakhs in the case of Assam; Rs. 110 lakhs in the case of N. W. F. Province; Rs. 50 lakhs in the case of Orissa; Rs. 105 lakhs in the case of Sind; Rs. 25 lakhs in the case of the United Provinces. The extra recurrent cost to the centre in this connection, after deducting the existing grants to some of the provinces, is expected to be Rs. 192 lakhs.

Apart from the subventions mentioned above, Orissa is to get a further non-recurrent grant of Rs. 19 lakhs and Sind of Rs. 5 lakhs by six equal steps beginning from the sixth year from the introduction of provincial autonomy, but subject to the proviso to Section 138(2) of the Act.

We have seen that the surrender of a portion of the income tax by the Centre and its distribution among the provinces had been recognized by the Federal Finance Committee as a necessity in the interests of provincial solvency. But in view of the possibilities of increased Central expenditures and the diminution of income (owing to the separation of Burma, etc.) under the new Constitution, Sir Otto Niemeyer expressed the opinion that at least five years will be required by the Centre "to consolidate its position after undertaking the initial adjustments". Moreover, there was no immediate prospect of the Railways resuming their contributions to the general revenues. He, therefore, recommended that the centre should allocate income tax to the provinces so that finally 50 per cent. of the distributable total has been relinquished in the intermediate five years. "The initial prescribed period under Section 138(2) (a) being five years, the prescribed sum which during that period the centre may in any year retain out of the assigned 50 per cent. shall be the whole, or such sum as is necessary to bring the proceeds of the 50 per cent, share accruing to the Centre together with any General Budget receipts from the Railways (on the basis at present provided by the Railways Convention) up to 13 crores, whichever is less."*

[•] Vide Report, par. 30.

Thus it would appear that ultimately half of the proceeds from income tax are to remain with the Centre while the other half are to be distributed among the provinces. The percentage share of the distributable portion of the income tax is as follows:—Madras 15, Bombay 20, Bengal 20, U. P. 15, Punjab 8, Bihar 10, Central Provinces 5, Assam 2, N. W. F. Province 1, Orissa 2, and Sind 2.

Sir Otto Niemeyer expressed the opinion that the Central Government would not be in a position to distribute, under the above scheme, any part of income tax proceeds for the first five years from the beginning of provincial autonomy, but that it might be in a position to distribute some of the proceeds, though not necessarily 50 per cent., within the first ten years of provincial autonomy Possibilities in this direction hinged on the financial condition of the railways and their ability once again to contribute to general revenues.

Possible New Sources of Revenue. Having taken it for granted that any reduction in expenditure (both Federal and Provincial) was out of the question under the new Constitution, the Federal Finance Committee of the Round Table Conference carried out an exhaustive enquiry into the possibility of exploiting new sources of revenue with a view to putting the provinces in a solvent condition. Among the sources of revenue belonging to the Federal Government they examined the possibilities of excise duties on tobacco, matches and other articles, monopolies, commercial stamps and corporation tax. The excise on tobacco was rejected mainly on the ground that it could not be relied upon to vield a substantial revenue in the near future. The excise on matches was expected to yield substantial amounts of revenue; but as we have seen. it has already been imposed by the Government of India, so that it may now be left out of consideration as a source of additional revenue in the future. As regard excise duties on other articles, the Committee expressed the opinion that they are likely to occupy an important position in the fiscal policy in the future, but that they could not rely upon them as an important source of revenue for a long time to come.

The case of monopolies of production and sale was dismissed by the Committee on the ground that from the fiscal point of view it is only in certain exceptional circumstances that they are to be subjected to an excise duty as a means of raising revenue. Moreover, they could not think of any new service or commodity whose monopoly was expected to yield substantial revenue. The suggestion that commercial stamp duties should be federalized was turned down by the Committee on the ground that the loss to provincial revenues would be unevenly distributed, and that the separation of stamp duties into two classes, viz., commercial and noncommercial, for purposes of division of revenue between the centre and provinces, would be an exceedingly difficult proposition. Thus in the Committee's opinion the Central Government had to be content with its existing sources of revenuefor the present at any rate.

In the provincial sphere the Committee examined the possibilities of taxation of tobacco, succession duties, terminal taxes and taxation of agricultural incomes. The taxation of tobacco was rejected on the ground that it would be difficult to impose it on account of the peculiar organization of the industry at the present time. Succession duties had failed in Bombay; and although their imposition and collection by the Federal Government for the benefit of the provinces was expected to yield more encouraging results, the various facts collected by the Committee in the course of their enquiries compelled them not to put too much reliance on these duties as a source of revenue in the near future. Terminal taxes, which are already being levied by municipalities, were likewise rejected by the Committee on grounds of inexpediency, especially if they were to be levied and collected by the provinces themselves. As regards the taxation of agricultural incomes, the Committee merely agreed that the right to impose such taxation should rest with the provinces, but in the absence of reliable data could offer no definite opinion in regard to the productivity of this tax. (It may, however, be taken as certain that, in spite of the reluctance of the Committee

to recommend the imposition of this tax, the yield from this source is likely to be fairly substantial, especially in those provinces where large agricultural estates are common).

It is not be wondered at that, in view of the above survey, the Committee's conclusions were far from encouraging. "We have found that such provincial taxes as appear to be within the sphere of practical politics in the immediate future cannot be relied on to yield any substantial early additions to provincial revenues . . . In the federal sphere, the excise on matches is the only tax which we feel justified in taking into account as an immediate reinforcement of federal revenues."

Local Finance.

A. Municipal Finance. Municipal administration in India began, strictly speaking, with the passing of the Act of 1850. Since that time a number of Acts have been passed both by the Central and Provincial Governments defining the scope and activities of municipalities. There are at the present time some 781 municipalities in British India with about 21 million people resident within the areas under their jurisdiction. It shows that only about 6 per cent. of the population of India is directly affected by municipal administration. But as towns are supposed to be the beacons of enlightenment in an agricultural country, municipal administration must be exercising a far-reaching indirect influence upon the population living outside its jurisdiction.

The municipalities in India have to perform certain functions within the areas under their jurisdiction. These functions may be grouped under two main heads: (a) Public safety, and (b) public health, convenience and instruction. Under the former head are included such activities as the lighting of streets and fire equipment, while under the latter come water supply, drainage, conservancy, medical relief, epidemic control, maintenance of roads, gardens and other public works, sanitation, education etc. To finance these activities the municipalities have at their disposal such sources

of revenue as octroi duties, taxes on houses and lands, taxes on animals and vehicles, taxes on professions and trades, water and lighting rates, conservancy charges, rents from municipal property, fees, receipts from markets etc. Certain municipalities also receive small occasional grants from the provincial Governments. This list of the sources of revenue is certainly a long and formidable one; but, situated as the masses in municipal towns are, the yield from all these sources amounts at present to only about Rs. 15 crores. Of this grand total over 40 per cent. (nearly Rs. 6 crores) is accounted for by the cities of Calcutta, Bombay, Madras and Rangoon. It means that less than Rs. o crores have to be divided among the remaining 777 municipalities in the country. Of the total municipal income in India, nearly 12 per cent. is accounted for by octroi duties, 30 per cent. by taxes on houses and lands, 15 per cent. by water rates, 7 per cent. by conservancy rates, 6 per cent. by contributions from provincial revenues, 5 per cent. by fees, about 2 per cent. each by taxes on animals and vehicles and rents from municipal property, and about 6 per cent. by receipts from markets and slaughter houses. The remaining 14 per cent. or so is accounted for by such items as taxes on professions and trades, tolls on roads and ferries, lighting rates and other miscellaneous charges.

As regards expenditure, nearly 12 per cent. is accounted for by general administration and collection charges, 5 per cent. or so by lighting, 33 per cent. by water supply, drainage and conservancy, nearly 5 per cent. by medical relief, 12 per cent. by public works, 10 per cent. by public instruction, and about 7 per cent. by interest on loans. The remaining 16 per cent. or so is accounted for by sanitation, maintenance of gardens and markets, epidemic control, fire brigade and other miscellaneous expenditure.

Defects in the Municipal Revenue System. To a casual observer the filth and squalor of Indian cities appears to be due to the poverty of town-dwellers; but a little reflection would show that its causes are more deep-rooted. To begin with it must be remembered that while the existing sources

are far from adequate to eradicate dirt and disease, even as they are, they are not being exploited to the full. The towndwellers of India are afraid of taxing themselves, with the result that all the municipal services are being starved for want of funds. As the exploitation of the new sources of revenue does not appear to yield very encouraging results, and as larger grants from provincial revenues would ultimately fall to a major extent upon the rural population, the exploitation of the existing sources of revenue in a more intensified form appears to be the only remedy. But the present municipal revenue system is also inequitous: a greater part of the burden falls upon those who are least able to bear it. The reform of the system would, therefore, involve a thorough overhaul and concentration upon subjecting luxuries and large properties to heavier taxtion. The system of financial administration is also in need of repairs: for the difficulties of municipalities are to no mean extent due to corruption and mismanagement in municipal administration in general. As the remedy lies in the gradual awakening of civic responsibility among the people, the provincial Governments must exercise greater control in cases where municipal administration shows signs of decay.

The Taxation Inquiry Committee recommended a number of new sources of revenue for municipalities, but none of them, except perhaps the taxation of advertisements, appears to be worth serious consideration. The extension of the scope of municipal trading and enterprise (such as the provision of electicity, tramways and buses, the erection and maintenance of cinema, theatres etc.) would at first sight appear to be a very fertile source of revenue; but seeing how hopelessly mismanaged the ordinary affairs of most of the municipalities are at the present time, it would be too much to expect them to manage commercial undertakings in an efficient manner. Such municipalities, however, as those of Calcutta and Bombay where civic traditions of a high standard have already been established, may embark upon such enterprises with safety.

B. Local or District Board Finance. The entire rural population of India, which constitutes nearly 90 per cent. of

India's population, lives under the local jurisdiction of District and Sub-District Boards. These local boards perform a variety of functions, such as the maintenance of roads, bridges and other civil works, as well as the maintenance of institutions in connection with education, sanitation, medical relief etc. For the performance of these functions they have such sources of revenue as provincial rates (which are levied on land), civil works and a number of miscellaneous items too numerous to count. At the present time the total revenues of all the local boards in India stand in the neighbourhood of Rs. 161/2 crores. Nearly 30 per cent, of this income is derived from provincial rates, about 18 per cent. from civil works and the remainder from miscellaneous sources. As regards expenditure, nearly 40 per cent, is accounted for by education, about 30 per cent. by civil works (maintenance of roads, bridges etc.) about 12 per cent. by sanitation, medical relief, etc. and the balance is shown against interest on loans and miscellaneous charges.

Defects and their remedies. Considering the fact that only about Rs. 161/2 crores are available for expenditure on rural areas (where more than 300 million people live) by local authorities themselves, it becomes abundantly clear that these local boards are mere playthings, and owing to the scarcity of funds can hardly justify their existence. Moreover, it is a well-known fact that, as in the case of municipalities, even such meagre sums as are available are not being efficiently and honesaly administered by the Boards. Improvements in two directions are therefore necessary: improvement in efficiency and integrity and a substantial increase in the income of local boards. As in the case of municipalities, graft and corruption would disappear only with the growth of the sense of civic responsibility; and in the meanwhile the Provincial Governments should exercise stricter control over the affairs of local boards whenever there is more than a suspicion of corruption and mismanagement. On the other hand it is imperative that the revenues of local boards should somehow be augmented. Most of the existing sources of revenue being more or less sterile, some new sources must be found. But as the masses

in rural areas are suffering from chronic poverty, it is difficult to suggest a new source. The local boards, therefore, must be subsidized from provincial revenues. All things considered it seems there is no better plan than the handing over of a part of the land revenue to local authorities (to whom it legitimately belongs), or of a part of the proceeds of tax on agricultural incomes which should be immediately introduced to meet the present provincial exigencies as well as in the interests of equity.

CHAPTER XXII.

TRADE.

L Internal Trade.

The Importance of Internal Trade in India, Like the United States of America, and unlike Britain, India is more vitally interested in her internal trade than in foreign trade. And the explanation is simple and obvious. Britain is a small, thickly populated country which depends for its existence upon purchasing raw materials from foreign countries and selling manufactured goods to them; foreign trade, therefore, is the very life breath of the country. But the conditions in India, in this respect, are totally different. With her vast area, her teeming population, the diversity of physical and climatic conditions, and the varied natural resources of the country, Iudia is, in the nature of things, much less dependent on foreign trade and far more vitally interested in her internal trade. The development of modern means of transport has greatly increased the scope of internal trade; and as industries develop, the exchange between town and country will automatically increase, and the importance of internal trade will be further enhanced. Even as it is, the imposing figures of the exports of cotton, jute, rice, wheat and oilseeds represent only a small percentage of India's total production; and it has been estimated that for every acre of land producing goods for export, eleven acres are cultivated for local consumption. A considerable allowance, however, must be made for the subsistence economy of the Indian cultivator. In the case of non-agricultural produce like manufactured goods and minerals, the position of internal trade is far stronger, as exports represent only a tiny fraction of the non-agricultural production. And even as regards the imports of the manufactured goods, the steadily improving figures of Indian manufactures reduce the importance of foreign imports, though in this respect the position of internal trade is not quite satisfactory.

The Statistics of Internal Trade. Dividing the internal trade of the country between coastal and inland trade, we

find that while the statistics for coastal trade, the bulk of which comes under internal trade, are fairly satisfactory, the statistics for the inland trade of the country are quite unsatisfactory; and what is vague and uncertain is naturally assumed to be unimportant. As the matter stands to-day, for the considerable part of the inland trade which is not and cannot be carried on by rail or river, we have no information whatsoever. The statistics of internal trade, as issued by the central and provincial governments, have always been very defective, as the goods transported by road, which are by no means negligible, are not taken into account: the statistics relate to quantity only and the figures of value, given in a few cases, are admittedly very rough; and trade within a block is not recorded. Even these statistics, admittedly defective as they are, have some value; but as a measure of retrenchment they were discontinued from 1922 to 1932. The publication of these statistics was resumed from the year 1933-34. It is necessary in the national interest that the statistics of internal trade should be maintained efficiently and accurately.

Coastal Trade. In the chapter on "Transport" we have discussed exhaustively the present conditions of coastal trade and its future importance. The bulk of the coastal trade is part of the internal trade of the country, though it includes a small percentage of foreign merchandise. And it must be observed that owing to the absence of land communication with Burma, the coastal trade between her and other provinces of India is of special importance; and while Burma exports large quantities of rice, kerosine oil, petroleum and timber to India, she imports coal, cotton piecegoods, gunny bags etc. With the separation of Burma, this considerable inland trade would be converted into foreign trade, and it is not unlikely that some tariff or other difficulties will crop up. The following table* shows the value of the coastal trade of India from 1927-28 to 1934-35.

^{*}Indian Finance Year-Book (1935), p. 137.

COASTAL TRADE OF INDIA. (Value in Lakhs of Rs.)

	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	1933-34	1934-35
Imports of Private Merchandise Indian Foreign Government Stores	I,OI,14 8,83 1,34	98,79 8,29 1,27	92,07 10,09 1,27	80,49 7,35 1,17	79,78 6,94 1,14	73,82	68,15 6,83	80,03
Total Merchandise Imports of Treasure	1,11,31	1,08,35	I,03,43	89,0I 1,52	87,86 1,38	80,79 1,97	74,78	86,47 1,16
Total Imports	1,12,79	1,10,04	1,05,22	90,53	89,24	82,76	75,48	87,63
Exports of Private Merchandise Indian Foreign Government Stores	92,56 12,56	85,21 11,20 99	82,69 12,65 1,15	71,82 9,41 97	69,73 8,42 73	74,75	72,45	81,75
Total Merchandise	1,06,16	97,40 1,86	96,49 1,54	82,20 1,43	78,88	82,75 1,18	80,07 73	89,49 1,10
Total Exports Total Trade	1,07,67	99,26	98,03	83,63	81,01	83,93	80,80	90,59
	4,20,40	2,09,30	4,00,40	71/4117	6410741	6010011	1,000	₹

Inland Trade. As has been already explained, the statistics for the inland trade of the country are unsatisfactory, notwithstanding the fact that it is far more important than the foreign trade. The inland trade of India was officially estimated in 1920-21 at Rs. 1,500 crores. Professor K. T. Shah* is of opinion that this is an underestimate and according to him the correct figure would be Rs. 2,500 crores. In any case, even according to the official figure, the ratio between inland and foreign trade is 2½: 1; according to Professor Shah the ratio is more than 4: 1. But considering the area and population of the country there can be no doubt that the volume of our internal trade is very small, and with the economic development of the country it is bound to increase very substantially. The present tendency all over the world, with high tariff walls and decreasing foreign markets, is to develop to its maximum capacity the internal trade of the country. The Government of India evidently does not believe in this policy; and the stoppage of the publication of the statistics of inland trade from 1922 to 1932 as a measure of economy is probably an indication of the importance it attaches to inland trade. At present we can only resort to statistics of rail and river borne trade to form some idea of the movement of the chief articles of trade The following tablet shows the volume of the inland trade of India which is river and rail borne.

VOLUME OF INLAND TRADE OF INDIA.
(In Thousands of Maunds).

Commod	ity.		1933-34	1934-35
Bones			T,51Q	2,136
Cement	•••		10,938	13,598
Coal and Coke		•••	312,428	343,225
Coffee	***	•••	225	150
Cotton (raw)	***		18,192	19,004
Twist and Yarn (Indian)		2,219	2,462
Do. (F	oreign)	•••	264	246
Piecegoods (Indian	1)	•••	7,367	7,993
Do. (Foreig	m)		1,273	1,185

^{*} K. T. Shah: Trade, Tariff and Transport, p. 122.

⁺ Indian Finance Year-Book (1935), p. 142

VOLUME OF INLAND TRADE OF INDIA.—(Contd.)

Commodity.	1933-34	1934-35
Dyes and Tans—Myrobalams	1,552	1,431
Fruits (dried)	7,728	7,770
Glass	783	863
Rice	39,723	49,529
Wheat	18,099	20,328
Wheat Flour	4,563	5,499
Miscellaneous Grain and Pulse	33,382	41,063
Indian Hemp and other fibres		
(excluding jute)	954	1,380
Hides (raw)	1,390	1,283
Skins (raw)	1,010	907
Hides and Skins, tanned and		
leather ,	619	609
Jute (raw)	30,715	2 4, 00 I
Gunny bags and Cloth	4,018	3,931
Iron and Steel Bars, Sheets etc.	27,816	3 0,873
Lac and Shellac	1,264	990
Manganese Ore	12,004	16,520
Mica	75	113
Oilcakes	8,171	8, <u>9</u> 84
Kerosene Oil	13,939	14,893
Vegetable Oils	3,532	4,430
Castor Seed	2,244	2,300
Groundauts	15,485	12,569
Linseed	9,115	6,230
Rape and Mustard Seed	7,648	7,130
Gingili or Til	2,074	2,021
Cotton Seed	5,390	6,722
Ghee	691	626
Sait	26,299	25,956
Saltpetre	410	442
Sugar, refined and unrefined	14,471	14,484
Gur, rab etc	10,510	9,776
Tea	3,747	3,881
Tobacco (raw)	2,936	2,928
Wood and Timber	10,174	13,046
Wool (raw)	612	429

Trade Centres in India. Among the trade centres of India the first place must be given to the important ports in the country: Calcutta, Bombay, Karachi, Rangoon and Madras. Besides being the principal ports, Calcutta and Bombay are also the most important industrial centres of India. The trade and

TRADE 631

industry of Bombay are preponderantly under Indian control as contrasted with Calcutta where they are largely under British control. Karachi is the principal centre of wheat trade and Rangoon specializes in rice, timber and oil. Madras is both a trading and industrial centre but not at all comparable to Calcutta or Bombay. Other important trade centres are Ahmedabad, Cawnpore, Delhi, Nagpur, Amritsar, Lahore, Agra, Lucknow and Benares. Ahmedabad has taken the first place from Bombay as the principal centre for the manufacture of cotton textiles, and it is next to Bombay the most important trading centre in the Bombay Presidency. Cawnnore is the most important industrial and trading centre in the United Provinces and is well known for its textile and leather industries. occupies a favourable position, being situated half-way between Calcutta and Bombay; it is a convenient distributing centre for Indian and foreign goods; and it is an important railway junction. Delhi is the capital of India, the junction for nine railway lines, and an important clearing house for the Punjab and the western districts of United Provinces. Nappur is an important industrial centre and its commercial importance is derived from its cotton mills, ginning and pressing factories and the large manganese deposits in its neighbourhood. Amritsar is an important trading centre for piecegoods and also deals in skins and hides. Its carpet industry is well known. Lahore is the trading centre for the agricultural province of the Punjab. Agra is a considerable industrial and trading centre and produces carpets, durries, embroideries, stone work and leather goods. Lucknow is commercially of importance as the distributing and collecting centre of the rich, agricultural province of Oudh. Benares is mainly of interest as a considerable centre of the silk weaving industry and brass work. We should also mention a number of other trading centres of secondary importance: Hyderabad (Deccan), Sholapur, Allahabad, Baroda, Mirzapore, Dacca, Srinagar, Juboulpore, Madura, Gwalior. Mandalay, Amraoti, Jaipur, Bangalore and Mysore.

Commercial Intelligence and Organization. On account of the keen international competition in trade and industry, it is

now a well-recognized function of the state to supply expert commercial and industrial intelligence, which helps to keep the commercial and industrial organization of the country wellposted about all relevant facts. The expert organization of commercial intelligence has been by no means a negligible factor in the spectacular success achieved by Japan. By means of trade commissioners and consuls, the state sets up an elaborate organization for the collection of commercial intelligence; and adequate measures are taken to make this intelligence available to the commercial bodies in the country. In all these respects the Government of India is very deficient. The Commercial Intelligence Department was organized in 1905, but the Industrial Commission has shown that there was no agency for distributing the commercial intelligence, publicly or privately, to the commercial community. The position to-day is less unsatisfactory; but the Government of India has a great deal to make up before it can come in line with the advanced commercial and industrial countries of the world. Above all there must be a perfect sympathy and understanding between the government and the Indian commercial community; and at present it is conspicuous by its absence. The Department of Commercial Intelligence and Statistics was reorganized in 1922 and now it forms a connecting link between the Government of India and the commercial community. In the Indian Trade Iournal it publishes every week statistics and other information of commercial value. The establishment of an Indian consular service, to look after Indian commercial interests, would be a step in the right direction. The Government of India has appointed a few trade commissioners in important commercial centres like Hamburg etc.

The first non-official commercial organizations in India were formed by European merchants in Calcutta, Bombay, Madras, Rangoon, Karachi and other important centres, with the Associated Chambers of Commerce as their federal organization. Their membership is preponderatingly European, though open to Indians also. Their organization is quite efficient and they enjoy the confidence of the government. Profiting by the

TRADE 633

example of European merchants, the Indian merchants also have gradually organized themselves in the various important trade centres and they have also formed a federal organization of their own. One outstanding defect of the Indian merchants' organization is that at some places these bodies have split up into two or more divisions, with the result that their strength is dissipated and none of them can speak with the authority of a united Indian commercial opinion. The divisions are due to personal, communal or provincial jealousies which have been the bane of our country. The Indian Merchants' Chamber and Bureau of Bombay is the premier organization of Indian merchants. The Indian merchants' organizations are often not in sympathy with the policy of the government, and they do not enjoy its confidence. Besides the chambers of commerce, there are also associations representing particular industries, such as cotton mills, jute mills, tea, coal etc. In the principal cities there are also associations of retail traders. Important commercial bodies are represented in the central and provincial legislatures, and the Indian and European merchants are separately represented. The representation of foreign merchants in the legislature of the country is not, so far as we are aware, paralleled anywhere else.

II. Foreign Trade.

A Brief Historical Retrospect. While we are primarily concerned here with Indian trade in modern times, a very brief historical retrospect will not be out of place and will help us to understand the process of evoluton which has given rise to our present position. The earliest beginnings of Indian trade are shrouded in mystery and await the research of the antiquarian; but there is ample evidence to show that as long ago as 3000 B.C. India had trading relations with ancient Babylon, that Egyptian mummies belonging to 2000 B.C. are found wrapped in Indian muslin of the finest quality which was known to the ancient Greeks as gangetika; and that our ancestors traded with Rome, China, Persia, Arabia etc. from the earliest historical times. When the means of transport were very primitive, in the nature of things trade was confined to rare and expensive commodities

of great value in small bulk; and Indian trade was no exception to this general rule. Indian exports chiefly consisted of fine textiles, metalware, ivory, perfumes, dye-stuffs and spices, and the imports consisted of certain minerals like brass, tin and lead and also wines and horses. But one consistent feature of Indian trade was that the exports by far exceeded the imports, the balance was paid for by importing large quantities of bullion into the country, and as the elder Pliny complained, vast sums of money were anually absorbed by commerce in India. There was also a considerable entrepot trade in silks and porcelain from China and with the help of its ships the country took a considerable share of the carrying trade. In its essence the trade of India during the Muslim period remained substantially the same as in the preceding Hundu period. The more regular development of the overland route between Lahore and Kabul and between Multan and Kandhar stimulated the overland trade of India and, judged by contemporary standards, both these routes were responsible for a considerable volume of trade. Moreover, the Mugul kings were enthusiatic pations of Indian industry which they stimulated by every means in their power. The improvement of roads under the Muguls further encouraged trade which was also carried on briskly along the waterways of the north and the coast line. The next important event is Vasco de Gama's discovery of the all sea route from Europe to India via the Cape of Good Hope. Till then Indian exports were sent to Europe via Suez whence they were sent overland to the Mediterranean coast and reached their destination through the merchants of Venice and Genoa. It was jealousy of these merchants and the effort to capture the lucrative Indian trade which led to the discovery of the all-sea route to India. But it must be observed that the various European traders who were flocking to India came to buy Indian manufactures and spices and even* "up to the eighteenth century the economic condition of India was relatively advanced, and Indian methods of production and of industrial and commercial organization could stand

^{*} Anstey: Economic Development of India, p. 5.

TRADE 635.

comparison with those in vogue in any other part of the world". Two outstanding events of the eighteenth largely responsible for the downfall century are Indian industry and trade: the British conquest of India and the industrial revolution in England. Many invaders had come to India before and conquered the country. But when they scttled down to rule it they identified themselves entirely with the country and like Louis XIV every one of the could have said, "I.'etat, c'et moi": I am the state. From this point of view, therefore, these foreign conquests made hardly any difference in the economic condition of the country; the economic policy, for example, of Aurangzeb and Shivaji, whatever their other differences, was more or less identical. But now for the first time in her long history India was governed by a foreign country, and the economic interests of the government and the people were very far from being identical. And as if that were not bad enough, now began the industrial revolution in England, financed largely out of the capital which India had accumulated through a favourable balance of trade spreading over long centuries, and which was now transported to England by the new rulers, the British nabobs. The industrial revolution dealt handicrafts everywhere a crushing below; and in India, in combination with the foreign rule, it resulted in an extraordinary industrial and commercial debacle, which has hardly any parallel in the economic history of the world. From the position of supplying half the world with cotton textiles, India was reduced to a position where it could supply only a tiny fraction of the home market. begin with, the East India Company rather stimulated Indian industry by selling its produce in Europe But under the pressure of vested interests, the use of Indian texiles in England was penalized either by complete prohibition or by heavy import duties. In the latter part of the eighteenth century, however. the policy of the East India Company was reversed: India came to be looked upon as a valuable source of raw materials which were necessary for the developing manufactures of England, and as an extensive market for selling the produce of British factories. And so we witness an extraordinary revolution in the trade of India: cotton textiles which she had been exporting to half the world since times immemorial became the principal commodity which was imported into India. It was indeed a disastrous revolution which had taken place in the trade of India, and during the "closing years of the eighteenth and the early years of the nineteenth centuries India was speedily transformed into a plantation for the production of primaries and a dumping ground for the finished products of the west".*

Trade in Modern Times. The trade of India in modern times may be said to begin from 1870. The reason for determining this date is that in 1860 the Suez Canal was opened and it curtailed the distance between India and England by 3,000 miles and largely stimulated the foreign trade of the country. In spite of several major difficulties both in India and outside India during this long period, the foreign trade of the country shows a steady increase during 1864-65 to 1928-20. The following table gives the value of merchandise (including Government transactions) for the last five years with quinquennial averages for the past seventy years.

^{*} Parimal Roy: Indian's Foreign Trade since 1870, p. 11.

[†] Raview of the Trade of India (1934-35), p. 176.

Foreign Trade of India.

IN LAKES OF RUPLES

Period.	Imports.	Exports.	TOTAL
1869-70 to 1873-74 1874-75 to 1978-79 1879-80 to 1883-84 1884-85 to 1888-89 1889-90 to 1893-94 1894-95 to 1898-99 1899-1900 to 1903-04 1904-05 to 1908-09 1909-10 to 1913-14 1914-15 to 1918-19 1919-20 to 1923-24	31,70 33,04 38,36 50,16 61,51 70,78 43,67 84,68 1,19,85 1,51,67 1,59,25 2,67,05	55,86 56,25 60,32 79,08 88,64 1,04,99 1,07,53 1,24,92 1,65,44 2,24,23 2,25,83 3,06,38	87,56 89,29 98,68 1,29,24 1,50,15 1,75,77 1,81,20 2,09,60 2,85,29 3,75,90 3,85,08 5,73,43
7-1 0 - 7	2,51,02 1,61,14	3,53,51 1,98,60	6,04,53 3,59,74
In the year -	İ		
1932-33 · · · · · · · · · · · · · · · · · ·	1,73,06 1,30,04 1,35,02 1,17,31 1,34,59	2,26,50 1,61,20 1,36,07 1,50,23 1,55,04	3,99,56 2,91,84 2,71,09 2,67,54 2,89,63

It will be observed that both the imports and the exports register a steady progress from 1864-65 to 1928-29, and in spite of everything the trade of India has been uniformly increasing till 1929 when the great depression started, except for a slight set-back in the imports from 1924-25 to 1928-29. The imports have jumped up from Rs. 31.70 crores which is the quinquennial average for 1864-65 to 1868-69 to Rs. 267.05 crores which is quinquennial average for 1919-20 to 1923-24 and which registers the high water mark of the imports so far. The exports register a perfectly uniform increase upto 1929; and while the quinquennial average for 1864-65 to 1868-69 is Rs. 55.86 crores, that for 1924-25 to 1928-29 is Rs. 353.51 crores. And during this same

period the total trade has jumped up from Rs. 87.56 crores to Rs. 604.53 crores, registering a perfectly uniform increase in spite of the many vicissitudes through which both India and the rest of the world have passed during this long period. We have already mentioned the opening of the Suez Canal as the most important single cause which contributed to the growth of India's foreign trade during this period. To it must be added the improved means of communication in the country by means of railways, roads, posts and telegraphs; the establishment of peace and order which the British conquest brought to the country; and the lowering of freights which followed the improvements in shipbuilding and the fostering of national mercantile marines by the various states. The numerous internal customs barriers and transit duties which had so long impeded trade were swept away. Free trade, which suited British interests at the time, also prevailed in India, on the assumption that what was good for British interests must be necessarily good for Indian interests. The result was that the volume and character of India's foreign trade were revolutionized; the exports consisted of raw material of considerable bulk and comparatively low value such as cotton, jute, wheat, rice, oilseeds, tea and hides and skins; the imports consisted of manufactured goods of small bulk and comparatively high value such as cotton piecegoods, machinary, hardware, railway materials, glassware, sugar, metals etc. Britain also carried on a considerable entrepot trade in Indian produce, distributing it among other European countries; and British supremacy in India's foreign trade was due to the British control of Indian railways, shipping and banking, her powerful trade organization in the country, and above all her political power which gave her the control over the economic policy of the country.

Some Outstanding Landmarks of Indian Trade in Modern Times. This long period of Indian trade from 1870 to the present day may be divided into four sections: the pre-war period between 1870 to 1914; the war period between 1914 to 1918; the post war period between 1919 to 1929; and the depression from 1929 to the present day. We shall very briefly

TRADE 639

review the outstanding landmarks of Indian trade in modern times. Just before the commencement of our period, owing to the American Civil War between 1864-69, there were large exports of raw cotton at high prices to England, and the imports of piecegoods were checked owing to England's difficulty in obtaining cotton. During the last quarter of the nineteenth century the trade development was comparatively slow as the rupee had been steadily losing in gold value and the violent oscillations in its exchange value introduced a considerable element of speculation and uncertainty in foreign trade. The situation was further aggravated by the great famines during this period and the repeated visitations of plague. Finally, while the stabilization of the exchange value of the rupee at 1s. 4d. stimulated trade with gold standard countries, the appreciation of the rupee dealt a blow to our trade in textiles with China and Japan. The first fourteen years of this century witnessed a remarkable expansion in the foreign trade as trading conditions, both in India and outside, were very favourable.

During the war trading conditions were entirely transformed. There was a complete cessation of trade with the enemy countries, and the discontinuance of trade with Germany affected India adversely, as in the pre-war period she had been India's best customer after Britain. Even trade with the allied countries could not be maintained at the normal level owing to their pre-occupation with war; and trade with neutrals was restricted to prevent munitions of war reaching Germany. There was a very sharp rise in freights on account of the sinking of a large number of ships by Germany, the pressure of war requirements, and the shortage of shipping space available, on account of the disappearance of the enemy tonnage. Its effect on Indian trade was very adverse; and this shortage of shipping handicaped India severely in selling her commodities, for which there was a great demand during the war. The dislocation of foreign exchanges and the insecurity of the sea were further disturbing factors. The demand for sand bags for trench warfare and of hides for soldiers' boots greatly stimulated the export trade, which was handicaped, however, by govern-

ment control and the difficulties regarding export finance, due to the curtailment in the sale of Council Bills. The import trade did not experience the same revival but the gap left open by Britain was filled up by Japan and the United States, who exploited the situation to their own advantage. While there was a considerable fall in the volume of exports and a much greater fall in the volume of imports during the war, prices during the war had soared very high and it is estimated, on the basis of 1913-14 prices, that the prices of imports in 1918-19 had appreciated by 168 per cent. and that of exports by 50 per cent. What the foreign trade had lost in volume it had made up in prices. It will be observed that the prices of imported goods had appreciated very much more than the prices of exported commodities; and it is obvious that this change affected our country very adversely. The war, however, by the temporary disappearance of foreign competition stimulated our industries; and as a result we find that the percentage of manufactured goods among our exports rose from 22 4 per cent. in 1913-14 to 36.6 per cent. in 1918-19; but the country had not been fully prepared to take advantage of the opportunity for the development of its industries.

The early post-war period in India, as in a number of other countries, was characterized by a trade boom due to the removal of war-time restrictions, the improvement in the shipping situation, the gradual resumption of commercial intercourse with enemy countries, and the eager desire to satisfy wants which had been starved during the war period. The revival of trade in general and the exports in particular would have been far greater but for the railway congestion in India, the rise in the exchange value of the rupee, unstable foreign exchanges, high prices, labour troubles, and the continued restrictions on the export of cereals owing to the failure of the monsoon in 1918-19. But the pace of the post-war boom was too fast and before long it was followed by a slump. The export trade was the first to be affected: there was a slackening of demand from the allied countries where the markets were glutted with Indian produce; the countries of Central Europe were unable to buy Indian proTRADE 641

duce owing to the unexampled depreciation in their currencies and their shattered resources: the severe crisis in Japan prevented the export of cotton to that country; the misguided attempts of the Government of India to stabilize the rupee at 2s. (gold), as recommended by the Babington-Smith Committee, further crippled the already weak export trade; and the unsatisfactory monsoon of 1920 and the high prices of food stuffs necessitated the continuation of the embargo on their export. The import trade, on the other hand, went on expanding: during the war the country had been starved of many of the imported necessities, and the large orders for machinery and other goods which had been placed with the manufacturers were now executed and goods began to pour in; and the high exchange value of the rupee further stimulated the import trade. It is not surprising, therefore, that there was a heavy balance of trade against India of Rs. 79.80 crores in 1920-21 and Rs. 33.93 crores in 1921-22. The collapse of the rupee which followed the failure to stabilize it at 2s. (gold) resulted in heavy losses to the importers, and the year 1921-22 was one of unrelieved depression. But gradually the trend towards the establishment of normal conditions gathered strength by the help of the progressive stabilization of European currencies, the improvement in the credit position of the Central European countries, and putting out of the way the impossible reparations question. This improvement continued till 1929 when the greatest depression in the history of the international trade set in, out of which we have not vet emerged.

The depression which began in 1929 with a catastrophic fall in prices has hit international trade very hard all over the world, and India, like the rest of the world, has suffered greatly from it. But as the fall in the prices of agricultural produce has been much greater than the fall in the prices of manufactured goods, the agricultural countries have been specially hard hit by the present slump. The quinquennial average of imports during 1929-30 to 1933-34 fell from Rs. 251.02 crores (the previous quinquennial average) to Rs. 161.14 crores; and the exports correspondingly fell from Rs. 353.51 crores to

Rs. 198.60 crores. During 1934-35 the imports amounted to Rs. 134.59 crores and the exports amounted to Rs. 155.04 crores. These figures give us an idea of the extent of the depression, and a glance at them is enough to dispel the fulse optimism that we have emerged out of the depression; and though the figures for 1934-35 constitute a slight improvement on the previous year, it is yet too premature to say that we have turned the corner. One striking feature of the foreign trade of India since the depression has been that the fall in our exports has been far greater than the fall in our imports, and a substantial part of the latter are paid for by exporting large quantities of treasure, an unprecedented feature in our foreign trade. During the last four years (1930-31 to 1934-35) the net export of treasure from India has amounted to the colossal sum of Rs. 248.26 crores, out of which gold accounted for Rs. 233.09 crores. It does not need any elaborate argument to show that our imports (of goods and services together) cannot be indefinitely financed by exports of gold, and so the present position of our foreign trade must inevitably change, either by the exports registering a sharp advance, or by the imports registering a corresponding decline, or by both of these tendencies working simultaneously. We do not see any signs of the exports registering any substantial advance in the near future, and we are inclined to think that ultimately the imports must register a sharp decline, as the country finds it more and more difficult to continue to export enormous amounts of gold. In other words, not only is our foreign trade likely to be sharply curtailed, but there is a possibility that the very basis of our economy may be transformed. As the country will be increasingly disabled from paying for manufactured imports by exports of raw materials, it will be forced to depend upon itself to a greater extent for the provision of its necessities in the shape of manufactured goods. The future tendency of our foreign trade holds out some very interesting possibilities, and the student of Indian economic problems will watch them with the greatest interest.

Fluctuations in the Volume of Trade and Prices. In order to understand correctly the tendency of our foreign trade,

it must be studied not only from the point of view of value but also from the point of view of volume and prices. In the following table* the values of the imports and exports of merchandise have been compiled on the basis of the declared values in 1913-14 to afford some indication of the changes in the volume of trade. These statistics are necessarily approximate but they are sufficiently accurate to afford a fair measure of the course of trade.

IN CRORES OF RUPEES.

	1913-14	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	1933-34	1934-35
Imports	183	156	181	190	189	157	143	162	146	172
Exports	244	228	248	260	263	235	200	176	209	216
Total trade in merchan- dise (excluding re- exports)	427	384	429	450	452	392	343	338	355	388

The table shows that there was improvement during 1934-35 in the volume of both exports and imports, but the recovery in the case of imports was much larger than in the case of exports. The extent to which the general level of prices for imported articles adjusted itself to the general level of prices for exported articles may also be seen from the following tindex numbers which have been obtained by comparing the values of imports and exports, as shown in the preceding table, with the values actually recorded for each.

		1913-14	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	1933-34	1934-35
Imports	 ···	100	148	136	133	128	105	88	82	79	77
Exports	 	100	132	130	127	118	94	78	75	70	70

^{*} Review of the Trade of India (1934-35), p. 15.

[†] Review of the Trade of India (1934-35), p. 16.

It will be seen that export prices are still on a lower level than prices of imported articles. The margin between the index numbers for imports and exports, which was 9 points in 1933-34, declined in 1934-35 to 7 points due to a fall of 2 points in the import index number. The index numbers given here refer to ex-duty prices at ports.

Outstanding Features of our Foreign Trade. The imports and exports of India may be classified under five main divisions and the following tables give us the average value of imports and exports for each of these divisions before the war, during the war, and after the war; and the exact value for 1933-34 and 1934-35. The pre-war average means the average of the five years 1909-10 to 1913-14, the war average the average of the five years 1914-15 to 1918-19, and the post-war average the average of the five years 1919-20 to 1923-24.

Imports*

IN CRORES OF RUPRES.

Commodities.	Pre-War average.	War	Post-War average.	1933-34	1934-35.
Food, Drink and Tobacco	21.84	26.38	37.82	12-24	13.86
Raw Materials and Produce and Articles mainly unmanufactured	10 08	9 87	 19 00	15:21	17:12
Articles wholly or mainly manufactured	111-78	108-23	192-55	85·20	98 51
Living Animals	· 4 3	·51	-24	-28	24
Postal Articles not specified	1-69	2.77	4-41	2.40	2.54
Grand Total	145-84	147 80	254 04	115-35	132 29

^{*} Review of the Trade of India (1934-35) pp. 178-9.

TRADE

Exports*

IN CRORES OF RUPEES.

Commodities.	Pre-War average.	War average.	Post-War average.	1933-34	1834-35
Food, Drink and Tobacco .	62 96	59 56	59-62	36.02	36-12
Raw Materials and Produce and Articles mainly unmanufac- tured	104-66	86-41	145-90	68 94	75·1 6
Articles wholly or mainly manufactured	50-61	68:44	77 96	 39 89	38-50
Living Animals	-35	·22	30	-09	-12
Postal Articles not specified	-90	1.32	2 52	1.34	1.30
Grand Total	219-49	215-96	286 33	146 31	151-21

These figures reveal very clearly that the bulk of our imports consist of manufactured goods and the bulk of our exports consist of raw materials. Further, it will be observed that while both the imports and the exports register a sharp decline, the latter have declined much more than the former. During the year 1934-35 there has been some recovery, but again the recovery in imports has been much greater than the recovery in exports. It will be noticed that the imports of raw materials and produce and articles mainly unmanufactured have increased from a pre-war average of Rs. 10.08 crores to Rs. 17.12 crores for 1934-35, and it is the only group, with the exception of postal articles not specified, which registers an advance and such a substantial advance. The principle commodities under this head in 1934-35 are oils (mineral, vegetable and animal) which account for Rs. 6.97 crores and cotton (raw and waste) which accounts for Rs. 5.28 crores, all other items being less than a crore. Under the imports of food, drink and tobacco we find that in 1934-35 the imports of fruits and vegetables have

^{*} Review of the Trade of India (1934-35), pp. 180-1.

gone up by about Rs. 30 lakhs as compared to the previous year's figure of rupees one crore, and this figure is not remarkable when we find that even in up-country places like Benares foreign fruit is invading the market. Incidentally it shows how very defective is our organization for the production and sale of fruit in this country. The imports of grain, pulse and flour registered the very high figure of Rs. 2.66 crores for 1934-35. In this connection we find that a notable and probably permanent change is taking place in the trade of India. While the pre-war figure under this head was under Rs. 20 lakhs, the war-average was about Rs. 53 lakhs, the post-war average was Rs. 2.69 crores. The year 1934-35 may be therefore taken more or less as a normal year so far as the imports of grain, pulse and flour are concerned. The imports of sugar during 1934-35 amounted to Rs. 2.10 crores as against the post-war average of about Rs. 20 crores. The decline is due to the policy of protecting sugar and incidentally reveals how much the state can do to stimulate any particular industry.

Under the imports of articles wholly or mainly manufactured, the first place must be given to cotton yarns and manufactures which accounted for the huge figure Rs. 21.76 crores in 1934-35, registering an increase of slightly over Rs. 4 crores over the previous year. It will be observed that as compared to Rs. 52 crores which is the pre-war average and the war average, and Rs. 71 crores which is the post-war average, this figure shows a very substantial decline. But it is obviously anomalous that India, which produces the bulk of her cotton manufactures, should continue to export large quantities of raw cotton and to import large quantities of cotton manufactures. If it was the settled policy of the state to make the country self-supporting in the matter of its cotton manufactures, the difficulties which stand in the way could be easily tackled vigorously and successfully. Next to cotton manufactures, the most important item of our import is machinery which accounted for Rs. 13.28 crores in 1934-35. It is about time that the problem of producing machinery in the country was seriously tackled, and a fraction of the amount which has been spent in buying machinery from

TRADE 647

foreign countries all these years would have sufficed to equip the country to satisfy its own requirements in the shape of machinery to a very substantial extent. In addition to the figure for machinery, we must take note of the fact that in 1934-35 iron and steel and manufactures thereof accounted for Rs. 6.37 crores, and metals other than iron and steel and manufactures thereof accounted for Rs. 4.98 crores, not to speak of cutlery and hardware which accounted for Rs. 5.43 crores, electrical goods which accounted for Rs. 2.81 crores, and motor vehicles which accounted for Rs. 6.60 crores. The figure for chemicals, drugs and medicines has steadily increased to Rs. 5.20 crores in 1934-35; dyes and colours account for Rs. 4.01 crores; woolen yarns and manufactures account for Rs. 3.45 crores; and silk yarns and manufactures for Rs. 2.79 crores.

Having gone through the outstanding features of the imports, with special reference to 1934-35, we now turn our attention to the exports. Under the head of food, drink and tobacco, we observe that the exports of grain, pulse and flour have registered a catastropic decline from the pre-war average of Rs. 45.81 crores, the war average of Rs. 37.41 crores, and the post-war average of Rs. 32.82 crores to the figure of Rs. 11.84 crores for 1934-35. And a careful study of it does not hold out any hope of full recovery. The exports of tea now take the first place under this head and the figure of Rs. 20.13 crores shows a fairly steady improvement from pre-war times. It is necessary to observe that the tea plantations in India are owned almost exclusively by the British. Coming to raw materials and produce and articles mainly unmanufactured, the first place must be given to cotton which accounts for Rs. 34.99 crores in 1934-35; and while this registers an improvement of about Rs. 8 crores on the previous year, the post-war average was nearly double and amounted to Rs. 65.62 crores. The second place goes to seeds which account for Rs. 10.54 crores in 1934-35, and this figure registers a further decline of more than Rs. 3 crores as compared to last year, while the pre-war average was Rs. 24.36 crores and the post-war average was Rs. 23.53 crores. Again we are inclined to think that this catastropic fall will prove to be

permanent and not temporary, unless there is an improvement in prices. The export of raw jute amounted to Rs. 10.87 crores while the pre-war average was Rs. 22.20 crores and the post-war average was Rs. 19.52 crores. But as India has the monopoly of jute production and there are no alternative sources of supply, we may take this decline to be due exclusively to the general depression. The exports of hides and skins have fallen from an average value of about Rs. 10 crores to Rs. 3.13 crores in 1934-35; gums, resins and lac have fallen from a post-war average of about Rs. 81/2 crores to about Rs. 31/2 crores in 1934-35; and similarly the exports of raw wool have fallen from an average of about Rs. 31/2 crores to about Rs. 11/2 crores in 1934-35. Among the articles wholly or mainly manufactured, the first place must go to jute yarns and manufactures which accounted for Rs. 21.46 crores in 1934-35 as compared to the pre-war average of Rs. 20.24 crores, the war average of Rs. 40.19 crores, and the post-war average of Rs. 43.15 crores. The second place goes to hides and skins, tanned or dressed, and leather which account for Rs. 5.47 crores in 1934-35 as compared to the postwar average of Rs. 6,24 crores. Cotton yarns and manufactures, which maintained a level of more than Rs. 11 crores before the war and during the war and had a post-war average of slightly over Rs. 17 crores have fallen to the low level of Rs. 2.64 crores. The export of metals and their manufactures in 1934-35 total over Rs. 3 crores, and while there is a fall of about Rs. 37 lakhs as compared to the previous year, this figure is much higher than any previous quinquennial average.

The Direction of India's Trade. No study of the trade of India would be complete without a close scrutiny of the direction of trade. The following tables* give the percentages of our imports from and exports to the different countries of the world before the war and during the four years from 1931-32 to 1934-35.

^{*} Review of the Trade of India (1934-35), pp. 128 and 129.

TRADE Imports

Country.	1913-14	1931-32	1932-33	1933-34	1934-35
	Per	Рег	Per	Per	Per
	cent.	cent.	cent.	cent.	cent.
United Kingdom	64-1	35.5	36.8	41.7	40-6
Germany	6-9	8-1	7.8	7.7	7-6
Tava	5.8	3.8	2.8	2.1	1-4
]apan	2.6	10-6	15-4	14.2	15.7
United States of America	2.6	10.2	8.5	6.2	6.4
Belgium	2.3	2.4	2.6	2.3	1.6
Austria and Hungary	2.3	-6	-5	-5	٠5
Straits Settlements	I·B	2.3	2.1	2.6	2.3
Iran, Arabia, Iraq, Asiatic	!		'		
Turkey and Sumatra	1.5	3.0	2.0	1-9	2.5
France	1.5	1.7	1.5	1.3	1.2
Mauritias	1.3				l
Italy	1.2	2.8	3.0	2.5	2.3
China	- <u>,</u>	2.2	2.2	1.9	1.6
Netherlands	.8	1.6	1.3	1.6	1.0
Australia	.5	i.2	-8	1.9	7.7
Uonahana	-5	- 4	.4	-4	·š
Dutah Barnas	.4	-5	.3	.3	·ž
Carrier	4	1.1	1.3	1.1	1.0
Sanitandama	-3	1.0	1.0	- ĝ	î.ŏ
Kenya and Zanzibar	.3	2.9	1.7	2.1	2.4

Exports

Country.	1913-14	1931-32	1932-33	1933-34	1934-35
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
United Kingdom Germany	23·4 10·6	27·9 6·3	28·0 6·5	32·2 6·5	31·6 4·6
Japan	9·1 8·7 7·1	8·7 8·9 4·8	10·3 7·4 6·0	8·5 9·6 4·9	15·7 8·5 3·5
Belgium Austria and Hungary	4·8 4·0	2.8	3.0	3.0	2.8
Ceylon Iran, Arabia, Iraq, Asiatic	3·6 3·2	5·0 2·1	5·0 2·2	4·2 1·8	4·2 1·7
Turkey and Sumatra Italy Hongkong	3·1 3·1	3·4 1·2	3·5 1·1	3·8 ·8	3·9 ·4
Straits Settlements	2·7 2·3	3·0 4·9 1·5	2·7 2·6 2·8	2·3 3·0 2·2	2·1 1·7 2·5
Central & South America Netherlands Australia	2·2 1·7 1·6	3·0 1·8	3·0 2·9	2·7 2·0	2·2 1·8
Kenva and Zanzibar Russia	1.0	1·5 ·3	.5 .3	·5 ·1	*4 •1
Spain Java "For orders" Cargos Total*	·8 ·8	·8 1·1	1·0 ·5	·9	·9 ·3 ·2

These figures reveal certain interesting facts and tendencies. The United Kingdom occupies the first place both in our imports and exports but the imports from the United Kingdom are substantially greater than the exports to her and the balance of trade is invariably against India. At the beginning of this century the imports from the United Kingdom amounted to as much as 69 per cent of our total imports, and there has been a marked tendency for the imports to be diverted from the United Kingdom to other countries, until in 1931-32 the share of the United Kingdom amounted to 35.5 per cent only. Since then, on account of the preferential treatment accorded to goods from the United Kingdom under the Otlawa Agreement and otherwise, the imports from the United Kingdom have recorded a substantial improvement to 41.7 per cent in 1933-34 and to 40.6 per cent in 1934-35. It is obvious that in spite of the several advantages which she enjoys in India, the United Kingdom is unable to maintain its position in the Indian market without preferential treatment; and the last great war brought about a permanent change in this connection. An effort is being made to counteract it by means of tariff manipulations at the expense of India, and we shall discuss it in detail in the next chapter.

Japan occupied a very insignificant place in the trade of India at the beginning of this century but she has been steadily improving her position until in 1913-14 she took 9.1 per cent of our exports and supplied 2.6 per cent of our imports. During the war the pre-war tendency of our imports to move away from the United Kingdom gathered strength; Germany was out of the picture; and Japan and the United States took ample advantage of the situation to consolidate their position in the Indian market. Japan now definitely occupies the second place both in our imports and exports, and her trade with India has recorded a fairly steady increase in spite of the great depression, the preference shown to her British competitors, and the fixing up of the upper limit of the imports of Japanese cotton piecegoods and the heavy customs duties on them. In 1934-35 the share of Japan in our imports and exports was 15.7 per cent in

trade 651

both, and as our exports are greater than our imports, it means that we sold more to Japan than we bought from her.

Germany occupies the third place in our imports and the United States the same place in our exports. In 1934-35 Germany supplied 7.6 per cent of our imports and took only 4.6 per cent of our exports, and the balance of trade went appreciably against India. The fall in our exports is due to the deliberate policy of Germany which, in the words of the Indian Trade Commissioner at Hamburg, "as a result of compensation trade and clearing agreements is obtaining large quantities of raw materials which she formerly bought of India." The obvious remedy is to negotiate a bilateral trade agreement with Germany, and the considerable imports from Germany to India would make the negotiation of such an agreement a very easy business. But while the exports of India have dwindled down very substautially, while several countries have adopted restrictive measures and clearing agreements for the improvement of their trade positions, while Great Britain has recently concluded bilateral trade agreements with nineteen countries,* while a resolution passed at Geneva in September 1935 urged that the recovery of international trade would be greatly assisted by the conclusion of bilateral agreements aiming at a more liberal economic policy, while, in a word, the condition of international trade has been rapidly and substantially transformed, the Govcrnment of India is wedded to its traditional foreign trade policy, and in a speech before the Associated Chambers of Commerce on 16th December 1935 Lord Willingdon is reported to have said, "I would affirm that nothing in the study of world economic conditions in the past few years, or in India's present circumstances, has shown that any departure from our accepted

Separately recorded from 1934-35.

The following are the nineteen countries: Argentina, Brazil, Denmark, Estonia, Finland, Germany, France, Iceland, Italy, Latreia, Lithuania, Netherlands, Norway, Rumania, Sweden, Turkey, Soviet Russia, Poland and Uruguay.

policy is necessary." We can hardly blame Germany or any other country if they take advantage of the situation and exploit it to their own advantage, while the Government of India continues to hug its "traditional foreign trade policy" and refuses to face the realities of the new situation created in international trade. And meantime the price of this misguided policy is paid by the poor Indian producer, and the very unsatisfactory position of our exports, whatever its other causes may be, is partly due to this mischievous policy.

The United States of America runs neck to neck with Germany in the trade of India. During 1934-35 she supplied 6.4 per cent of our imports and took 8.5 per cent of our exports. While the second place of Japan in our foreign trade is unchallenged, it is likely that the third place will be taken by the United States Owing to her own internal difficulties and the great depression, our trade with the United States has been more or less marking time but when the situation is stabilized, both our imports and exports should register an appreciable advance. Our trade with other countries need not detain us long. Before the war, on account of large imports of sugar, Java took the third place in our imports of which she supplied 5.8 per cent. But with the granting of protection to the sugar industry these imports have steadily declined and in 1934-35 Java was responsible for only 1.4 per cent of the imports. Our exports to France have declined from 7.1 per cent in 1913-14 to 3.5 per cent in 1934-35 while the corresponding decline in imports has been from 1.5 per cent to 1 2 per cent. Similarly Belgium consumes less of our exports which have declined from 4.8 per cent in 1913-14 to 2.8 per cent in 1934-35 while the corresponding change in imports is from 2.3 per cent to 1.6 per cent. Ceylon is the only country where our exports have increased to an appreciably greater extent than our imports; and she takes a considerable quantity of our exports which amounted to 4.2 per cent in 1934-35 as against I per cent of her imports during the same year. Italy is one of those few countries which have increased both their imports and exports with India as compared to the pre-war position; and our favourable balance of trade with China has disappeared. The imports from Kenya and Zanzibar have jumped up from the insignificant pre-war figure of .3 per cent to the appreciable figure of 2.4 per cent. Other countries do not call for any particular comment.

The Entrepot Trade in India. The entrepot trade of a country consists of re-exports of goods previously imported from other countries; and the geographical position of India, in the centre of the eastern hemisphere, gives her a very favourable position as a convenient meeting place for the trade of the far east and the west, and as a good distributing centre for the neighbouring Asiatic countries which have no sea-board of their own. Since times immemorial India has enjoyed a considerable entrepot trade, and in the old times it consisted chiefly of the imports of silk-goods and porcelain from China, pearls from Ceylon, precious stones and spices from the islands of the Fastern Archipelago, to be re-exported to the countries of the west; while Venetian glass and the like were imported from the countries of the west to be re-exported to the east. In modern times the entrepot trade of India has largely consisted of manufactured goods from Europe. America and Japan: and during 1934-35* the shares of the principal countries in the total reexport trade were the United Kingdom 30 per cent, Ceylon 13 per cent, the United States of America 7 per cent, Japan and Iraq 6 per cent each, Arabia 5 per cent, Iran, Kenya Colony. Aden and Dependencies, the Bahrein Islands, and the Straits Settlements 3 per cent. each, and France and Anglo-Egyptian Sudan 2 per cent. each. As usual, the bulk of the trade passed through Bombay, which accounted for 67 per cent, Karachi had 16 per cent and Bengal 10 per cent of the re-export trade. While the value of the entrepot trade of India during 1934-35 (Rs. 3.54 crores) registers a slight improvement as compared to 1933-34 (Rs. 3.41 crores), there has been a tremendous fall as compared

^{*} Review of the Trade of India (1934-35), p 125.

[†] Ibid, p. 198.

to the post-war average. The following table gives a comparative study of the total value of our re-exports during 1933-34 and 1934-35 as well as the average during the pre-war period, the war period and post-war period.

IN CRORES OF RUPEES.

		Pre-war average	Wat average	Post-war average	1933-34	1934-35
	-					
Total value of Re-exports		4-61	B 14	15.64	3-41	3-54

Among the articles re-exported none occupies a predominent position. During 1934-35 hides and skins accounted for Rs. 56.13 lakhs, cotton (raw and manufactured) for Rs. 35.11 lakhs, metals and ores for Rs. 30.12 lakhs, wool (raw and manufactures) for Rs. 26.24 lakhs, vehicles for Rs. 25.57 lakhs, silk (raw and manufactures) for Rs. 17.7 lakhs, and the various miscellaneous articles like hardware, machinery and millwork, sugar, apparel, gums and resins, fruits and vegetables, haberdashery and millinery, rubber manufactures and others accounted for Rs. 163.43 lakhs. But the prospects of our entrepot trade are far from rosy. There is a growing tendency among the various countries to establish direct trade relations and its effects are visible in the declining figures of our entrepot trade, apart from the great trade depression which we are passing through.

Balance of Trade and Movement of Treasure. A large surplus of exports over imports of private merchandise used to be a normal feature of India's foreign trade and this surplus was liquidated by payment of "home charges" and the importation of precious metals. India's average credit balance in merchandise was Rs. 78 crores in the five pre-war years, Rs. 76 crores during the five war years, and Rs. 53 crores during the five postwar years ending 1923-24. During the next quinquennium the

average rose to Rs, 113 crores, but it dropped to a low figure of Rs. 43 crores during the five years ending 1931-34. The year 1932-33 was the least favourable, the credit balance dropping to a little over Rs. 3 crores. In 1933-34 the balance in favour of India was Rs. 35 crores but 1934-35 saw a deterioration of the position, the balance dropping to Rs. 23 crores. While in itself a low credit balance need not cause perturbation, it is of the greatest significance in the case of India which has to make very large payments to the United Kingdom annually to meet the "home charges". The account has been balanced only by means of exports of gold from India which we shall discuss later. The following table* shows the exports of Indian merchandise, the re-exports of foreign merchandise, and the imports of foreign merchandise all on private account; the balance of trade in private merchandise; the imports and exports of gold, silver and currency notes all on private account, and the balance of transactions in treasure; and finally the total visible balance of trade. The figures given are the pre-war average, the war average, and for the last five years. The sign + means net export and the sign - net import.

^{*} Review of the Trade of India (1934-35), pp. 163 and 164.

BALANCE OF TRADE AND TREASURE.

			ı			7 (11)	(In Crores of of rupees.)	rupees.)	
		Pre-war average	<u> </u>	Wat average	1930-31	1931-32	1932-33	1933-34	1934-35
Exports of Indian merchandise (private)	(private) .	+219 50		+215-97	+220-49	+ 155 89	+132-27	+ 146-31	+ 151.21
Re-exports of Foreign merchandise (private)	(private)		+4 62	+8 14	+2.14	+4 66	+3.22	+3 42	+3-55
Imperts of Foreign merchandise (private)		145 85	288	-147 80	-163 58	- 125 72	-132-27	- 144.99	+131-80
Balance of trade in merchandise	:	+78.27	12.1	+76 31	+62-05	+34.83	+3.22	+34.74	+22-96
Gold (private)	:		- 28 87	18-2	-12.75	+57.98	+65.52	+57-05	+52:54
Silver (private)	:		-7.21	-2 99	-11.65	-2.59	73	10	37
Currency notes (private)	:	: - <u>:</u> :	· : :	:	-03	+.28	+.14	+ 19	+-37
Balance of transactions in treasure (private)	(private)		-36 08	- 10 80	-24.43	+55.65	+64 93	+57-23	+52:54
		- 4							
Total visible balance of trade	:	+42 19	£	+65.51	+37.62	+90.48	+68·15	+91.97	+75-50
			— 						

TRADE 657

Gold Exports. The greatest change that has occured in India's foreign trade during the last few years is that she has been converted from the position of a gold importing into a gold exporting country; and the net exports of gold from India during the four years ending March 1935 amounted in value to the colossal sum of Rs. 233.09 crores. While during the great depression, in India as everywhere else, there has been a substantial decline in the value of both imports and exports, the decline in our exports has been far greater than in our imports. The result is that quite a substantial amount of our imports (visible as well as invisible) is paid for by export of gold, and it is quite obvious that this process cannot last indefinitely, as India does not possess an unlimited stock of gold which she can go on continually exporting. This shows that the fundamental basis of our foreign trade at present is thoroughly unsound; and it does not need much foresight to predict that in a comparatively short time our foreign trade will register a radical change in order to adjust itself on a new basis. Either the exports will increase (of which there seems to be little chance at present), or the imports will decrease (which is quite likely), or the exchange value of the rupee will be forced down by a cessation in the flow of gold, which will result in a new adjustment in our foreign trade by stimulating exports and discouraging imports. But in whatever manner the adjustment may take place, this much is perfectly certain that our foreign trade cannot be indefinitely financed by exports of gold and an adjustment on a new basis must take place sooner or later, and sooner rather than later. The lowering of the exchange value of the rupee will facilitate this adjustment; and though the government may desire to fight against it by every means in its power, the cessation in the flow of exports of gold must inevitably force down the exchange value of the rupee, which appears to us to be not a very remote contingency.

Balance of Accounts. It will be observed from the last table that the total visible balance of trade is always in India's favour to a very substantial extent. How is this balance adjusted? It is adjusted by means of what are called "home

charges" which comprise the payment by India to United Kingdom of interest on loans, the furlough pay and pensions of British officers who have served in India, the expenditure on the army which the British government incurs for the benefit of India, the purchase of stores in the United Kingdom on behalf of the Government of India and such other items. The adjustment is carried out by means of Council Bills, purchase of sterling and other Government remittances to the United Kingdom. In addition certain "invisible" items enter into India's balance of accounts which comprise the very substantial amounts India has to pay for foreigners' profits in shipping, banking, insurance and other occupations, private remittances by foreign merchants, government officers and professional men, tourists' expenditure etc. which, in the nature of things, cannot be estimated accurately. We may sum up the principal debit and credit items in our dealings with foreign countries as follows:-

Debit.

Credit.

- Imports of merchandise.
- 2. Interest on loans raised abroad.
- Profits of foreign shipping, banking and insurance companies.
- Furlough pay and pensions to British officers in the United Kingdom.
- Remittances sent abroad by foreign merchants, govern-ment officers and professional men.
- 6. Purchase of stores and bullion on Government account.
- Remittances sent to Indian students and tourists abroad
- 8. Imports of treasure.

Exports of merchandisc.

Exports of treasure.

Remittances by foreigners for missionary institutions in India.

Tourists' expenditure in India.

The profits of foreign shipping, banking and insurance companies and the remittances sent abroad by foreign merchants, government officials and professional men constitute the biggest items in our "invisible imports" in the shape of services, and total up to a huge amount. It is not necessary here to estimate in detail the value of these services and the return which India gets for the vast sums which she annually pays for them. Suffice it to say that many of these services India has to accept beacuse she is not permitted to dispense with them, and the advantage which she derives from them is of a very doubtful character.

The "Drain." 1 The so-called drain theory has its origin in the fact that exports from India are usually greater in value than the imports, and it has been assumed that the excess of our exports represents the annual tribute which India pays to the United Kingdom on arcount of her political subjection. While it must be admitted that no tribute as such is paid by India to Britain, and that she does receive a return for every payment that she makes, the real point at issue is whether she receives an adequate zeturn. For the excess of her exports over imports, the return which India receives is generally comprised under the head of the "home charges." An analysis of these "home charges" shows that the most important item is interest on loans incurred on account of the railways and for general purposes. We cannot reasonably object to this item, provided the loans have been incurred bona fide for promoting the welfare of the country and at reasonable rates of interest. It is not possible here to scrutinize the various loans, the object for which they were incurred, and the rates of Interest. But it must be noted that the Indian National Congress, which is the most important political party in India, entertains very sérious doubts about the bona fides of some of these transactions, and it demands that all these transactions should be examined de novo by an impartial tribunal. The Government is not prepared to concede this demand or to have its bona fides questioned. Under these circumstances to cannot express any definite opinion about the point at issue." The stores purchased on behalf of India in the United Kingdom must be excluded from a discussion of the drain theory, because

^{&#}x27;Cf. Indian Economics-Jathar & Beri, Vol. II, pp. 271 et aeq.

though it is a perfectly tenable position to argue whether these stores could not be puschased more chearly elsewhere, or whether a greater reliance for their purchase could not be placed on the Indian market, the stores represent a material equivalent for what India has to pay, and in discussing the drain theory we are partially concerned in discussing those items in which the return which India receives is not in a material shape. India has to make heavy annual payments to the United Kingdom for civil and military services. Does she receive an adequate return for them? It is obvious that India makes these payments to the United Kingdom because she is under her political subjection, and the matter does not lend itself to an objective economic study. In our opinion, in order to confine the discussion within reasonable limits and to endeavour to reach some tangible conclusion, both the advantages of Par Britanica, and the degradation involved in the loss of national freedom, must be ruled out as too intangible to lend themselves to any precise economic calculation. There can be no question of their most vital importance, but that is really a matter for politicians, and we have no desire to poach on their preserves, as we are concerned with less important but more tangible issues. We shall permit ourselves only one observation. The maintenance of law and order is the very basis and foundation of all economic progress and its beneficial results from the economic point of view are incalculable. On the other hand, any government extravagance, however flagrant, could be justified on this basis; it is open to question whether law and order have succeeded in establishing in the country the peace of the grave or the peace of a vital and healthy existence; and nothing can compensate for the loss or political freedom and national self-respects

Indian opinion is more or less unanimous that the scale of salaries for foreign officials is extravagantly high; and perhaps nowhere is the disparity between the salaries of the men at the top and the men at the bottom greater than it is in India. The demand for the replacement of an expensive foreign personnel is based, apart from other considerations, on the cheapness of the Indian personnel; and the experience of

TRADE 661

the Indian officer, unlike that of the European officer, is available to the country even after his retirement. In connection with the military expenditure, it must be observed that the army in India is maintained to meet not only Indian but Imperial requirements, though India has to pay for it. This is totally unjustifiable on any grounds whatsoever, except those of political suzerainty.

The profits of foreign shipping, banking and insurance companies working in India, the interest and profits on foreign capital invested in the country, and the remittances abroad by the large number of foreigners employed in foreign-controlled concerns in India, constitute vast sums of money, and though they do not figure in the home charges, they are an important part of the drain. We have discussed the issues involved in different chapters devoted to these questions, and it is unnecessary to repeat ourselves here. But it must be observed that no national government will view with indifference or complacency the ceaseless flow of wealth from the country under these heads, and it would devise effective means to prevent it. Under the new constitution discrimination against the British vested interests would be illegal and ultra vires; and the possibility of building up national shipping etc. is effectively objectmated under it. In the consideration of the drain these are relevant facts which must be properly evaluated.

Land Frontier Trade. The extensive land frontier of India, which is about 6000 miles, is considerably larger than her coast line, but on account of the mountains and dense and impenetrable forests, there are very few passes, like the famous Khyber Pass and the Bolan Pass, where communication is possible. The land frontier trade of India dates from times immemorial, and during the Mughul period it was fairly brisk. In modern times, on account of the building of the strategic railways on the North-West Frontier, trans-frontier communication there has been considerably improved, and incidentally it has served to stimulate substantially our land frontier trade. While in 1916-17 our imports amounted to Rs. 12.81 crores and our exports amounted to Rs. 10.34 crores, making a total land

trade valued at Rs. 23.15 crores, in 1924-25, the last year for which the figures of our land-frontier trade are available, it amounted to Rs. 23.08 crores for imports and Rs. 18.73 for exports, making a total of Rs. 41.81 crores. Of course the land frontier trade cannot possibly compare with our sea-bourne trade, but it is well worth while nursing it, and the different countries like Afghanistan, Iran, Tibet, Siam, Nepal, Bhutan, Sikkim, Western China and Turkistan would provide, in course of time, valuable trade connections. Generally speaking the imports consist of raw materials like food-grains, hides and skins, wool, oilseeds and tobacco, and the exports consist of manufactured goods like cotton piece-goods (Indian and foreign), cotton yarn, metals and machinery, petroleum, salt, sugar, tea, tobacco etc. With the growth of our industries these countries will provide us with valuable markets, and geographically India is well situated to supply their demand for manufactured goods. Since 1925 no official statistics of the value of land frontier trade are published, and the Review of the Trade of India only publishes the quantities of rail-borne trade at stations adjacent to land frontier routes of India The following tables* indicate our imports and exports of principal commodities during the last three years.

Imports

All quantities in maunds to the nearest thousand,
except treasure.

Ar	TICTES.	_	1932-33	1033-34	1934-35
Grain and P	ulse		1,515,000	1,337,000	636,000
Hides and S	Skins		97,000	125,000	134,000
Ghi			60,000	56,000	61,000
Tobacco		•••	137,000	93,000	70,000
Raw Wool	••		71,000	174,000	152,000
Carpets and	Rugs		20,000	14,000	11,000
Borax	•••	•••	7,000	9,000	9,000
Charas		.,.	2,000	2,000	2,000
Raw Jute	***		208,000	271,000	349,000
Oilsceds			803,000	715,000	607,000
Gold (in our	aces)		36,000	66,000	78,000
Silver (in o	unces)		6,847,000	9,796,000	9,712,000

^{*} Review of the Trade of India (1934-35) pp. 335 to 337.

Exports

All quantities in maunds to the nearest thousand, except treasure.

Articles.	1932-33	1933-34	1934-35
Cotton Twist and Yarn Cotton Picce-goods (Indian) Cotton Picce-goods (foreign)	74,000 295,000 200,000	66,000 287,000 211,000	58,000 249,000 218,000
Dyes and Dyeing materials Grain and Pulse Iron and Steel (unwrought,	34,000 3,079,000	20,000 3,217,000	14,000 3,064,000
sections, machinery, hard- ware and cutlery) Petroleum	286,000 311,000	381,000 357,000	450,000 302,000
Salt Sugar (refined) Sugar (unrefined) Tea	1,706,000 741,000 83,000	1,501,000 888,000 166,000	1,526,000 910,000 108,000 267,000
Tobacco Brass and Copper Betclinuts	112,000 29,000 32,000	107,000	111,000
Gold (in ounces) Silver (in ounces)	3,000	24,000	117,000 897,000.

A glance at these figures is enough to show that the land frontier trade is a valuable and growing trade and should be carefully nursed. It will be observed that an appreciable amount of our entrepot trade is accounted for by the land-frontier trade.

Foreign Trade and National Prosperity. The common assumption that national prosperity is to be measured by the volume of foreign trade cannot bear a close scrutiny; and a simple illustration will make this point quite clear. India exports large quantities of raw cotton and imports large quantities of cotton piece-goods; and these constitute an important portion of her foreign trade. If the cotton textile industry in India takes a rapid stride onwards, it is obvious that both the imports of cotton piecegoods and the exports of raw cotton

will decline and the former may disappear. Thus while the foreign trade will register a sharp decline, the national prosperity, far from receiving a set-back, will register a considerable advance. But instead of taking this hypothetical though very probable case, we may take an actual illustration from our sugar industry. The rise and growth of the sugar industry during the last few years has undoubtedly resulted in a very sharp decline in the imports of sugar into this country, and to that extent a decline in our foreign trade; but far from affecting the national prosperity adversely, it has positively advanced it. Therefore the assumption that foreign trade is necessarily beneficial to a country cannot be sustained; and the benefits of foreign trade will depend upon the nature of the commodities traded in, the capacity of a country to produce those commodities on account of its natural resources and manufacturing skill, and the various other factors which together constitute the economic life of the country. foreign trade alone determined the prosperity of a country, India would occupy a high place in the world, next only after the United Kingdom, U. S. A., France, Germany and Japan. But the extreme poverty of the Indian is too well known to require any proof, notwithstanding the large foreign trade of the country and the high place she occupies in international trade. In this connection it is necessary to add, however, that as regards per capita trade India stands very nearly at the bottom. But even a large per capita trade is not a sure index of national prosperity; and it may indicate that a nation is prosperous and enjoys comforts and luxuries by participating in an international exchange of commodities; or it may indicate that the people live in a poor and unproductive territory and are compelled to sell their services and import in return bare necessities like simple food, clothing, fuel, building materials and sometimes even drinking water, as is the case in Aden. It is obviously fallacious to judge national prosperity merely by the foreign trade of the country.

The Future of India's Foreign Trade. In discussing the future of India's foreign trade, we are obviously leaving

TRADE 665

behind the solid ground of ascertained fact for the uncertain regions of surmise and conjecture; but it is necessary to evaluate the tendencies of foreign trade in general and of India in particular. Our reading of the situation is that economic nationalism has come to stay and perhaps it is a natural corollary of political nationalism which has been such a dominating tendency of the modern age. While political exploitation by a foreign country is a great and obvious calamity that can befall any nation, economic exploitation is a greater calamity and its grip is more tenacious and dangerous. Economic nationalism is the growth of a clear realization of the dangers lurking in the economic exploitation of a country; and its success would mean that ultimately the foreign trade of a country would tend to be governed more and more by natural resources; while the artificial advantages given by political power or the earlier acquisition of technical skill or a superior organization would tend to disappear. After all technical skill and efficient organization are not the monopoly of any people or country, and even if a particular country has gone ahead. others tend to imitate it and to overtake it; and modern technology lends itself to this imitation and overtaking at a very rapid pace. We are heartily in sympathy with economic nationalism; and we are of opinion that in spite of all the difficulties in the way, economic nationalism in India is a force to be reckoned with, and that it will gather steady momentum. Its immediate effect on the foreign trade of the country would be undoubtedly to curtail its volume; but as we have pointed out above, that is not necessarily a misfortune and need not cause us any dismay.

CHAPTER XXIII.

TRADE AGREEMENTS

I. Ottawa Agreement.

A Brief Survey of Imperial Preference. In order to understand the Ottawa Agreement in its proper perspective, it is necessary to understand its previous history. The idea of organizing the British Empire into an economic unit by means of tariff preferences is prominently associated with Joseph Chamberlain. The nineteenth century witnessed the climax in the growth of British industries, but with the advent of Germany, U. S. A. and more recently Japan into the field of competition, and the industrial progress in the different countries of the world, Britain's industrial supremacy remained by no means unchallenged, and slowly but steadily the percentage of her share in the trade of the world has declined while that of her competitors has increased. The policy of imperial preference was designed to meet the situation created by foreign competition which British industries were unable to meet on equal terms. During the war Japan and the United States made rapid progress in their industries and the era of British industrial supremacy was definitely closed. The war left Britain with a huge debt, both national and American, heavy taxation, a well organized labour movement, and a good standard of living, entailing high wages, heavy cost of production, declining exports, and an acute unemployment problem. It is interesting to observe that imperial preference was one of those few issues on which the views of Government of India were backed by public opinion in the country. In 1903 the Covernment of India expressed its opinion that, "from an economic standpoint India has something, but not perhaps very much, to offer to the Empire, that she has very little to gain in return, and that she has a great deal to lose or to risk." And this same view was expressed by India's representatives at the Imperial Economic Council of 1923. As for its economics, it is obvious that imperial preference is a kind of protection granted to the favoured country; and while under protection the consumer makes a sacrifice in the interests of national industry, under imperial preference he is called upon to make such a sacrifice in the interests of the industries of the favoured country or in imperial interests. And if an additional burden is not imposed on the consumer, it is shifted to the taxpayer; for preference can be granted either by increasing the tax on the goods of the non-favoured countries, or by decreasing it on the goods of the favoured country, or partly one and partly the other. The Indian naturally enquires why he should voluntarily make a sacrifice in the interests of imperialism when that very imperialism is the staunchest opponent of the political and economic freedom of his country; and to that question no satisfactory answer has been given and perhaps none is possible. Again, imperial preference implies that the advantages enjoyed under it by the different parties should be equal and reciprocal. and it should not involve any relaxation or modification of the policy of protection which any state may have introduced to foster its industries. The advantages enjoyed by India and the United Kingdom under the Ottawa Agreement are, as we shall see later, totally unequal; and the Indo-British Trade Agreement, negotiated under the Ottawa Agreement, cuts at the roots of the fiscal autonomy convention in India.

The Background of Ottowa Agreement. The objective of the United Kingdom was to utilise the Ottawa Conference to stimulate her declining industry and trade, as the different measures adopted by the British Government, such as the imposition of the McKenna Duties, the passing of the Safeguarding of Industries Act, the abandonment of the Gold Standard, and the Import Duties Act, had not succeeded in solving the problem. If the United Kingdom could be assured of increased markets in the Empire, a great impetus would be given to British trade and industry. The Dominions had been willing and even anxious in the past to enter into such agreements; and the necessity of the United Kingdom, which had been

opposed to preferential trade agreements with the Dominions in the heyday of her industrial supremacy, was now their opportunity to conclude such agreements. As far as India was concerned, public opinion in the country was definitely opposed to imperial preference, and neither the Government of India nor any important commercial interest in the country had shown any desire to enter into any such agreement.* But the governing factor in the situation was that while the percentage of our imports from the United Kingdom was 64.1 in 1913-14, in 1931-32 it was only 35.5; and while this percentage could not he improved by competition in the open market. Britain was determined to improve it by means of tariff manipulations. It must be observed that preference had been already granted to the United Kingdom by the back door in the Iron and Steel and Cotton Protection Bills of 1930, by which lower duties had been imposed on the British imports of these goods into India without any reciprocal advantage whatsoever to this country. While the preference granted to the United Kingdom was transparently clear, the principle was piously enunciated that the preference was a by-product of a tariff arrangement made primarily in the interest of the Indian consumer. In addition to the industrial conditions in the United Kingdom, the Wall Street crash of 1929 had started the severest trade depression in the world and the following table shows the position of the world trade on the eye of the Ottawa Agreement.

	Annual Average 1925 to 1929	1929	1930	1931
			-	
Value of World Trade	100	104.5	85.5	60
Quantum of World Trade	100	110	101.5	74

Apart from other considerations, it would be interesting to study the effects of the Ottawa Agreement on the trade of the

^{*} See the Chapter on Imperial Preference in the Report of the Indian Fiscal Commission.

world; and it is obvious that a mere diversion of trade into new and artificial channels is more likely to retard than to encourage world recovery.

The Principle Clauses of Ottawa Agreement. On 20th August 1932 the Indian and the British delegates entered into a trade agreement on behalf of their respective Governments. According to this agreement India undertakes the following:

- (a) To give a 7½ per cent preserence on motor vehicles (other than motor cycles) imported from the United Kingdom.
- (b) To give a 10 per cent preference to general imports from the United Kingdom.
- (c) To adjust, on the basis of present selling prices, the duties on galvanised sheet in the Indian Tariff as follows: Rs. 30 per ton on sheet made in the United Kingdom from Indian sheet bar; Rs. 53 per ton on sheet made in the United Kingdom from the other sheet bar; and Rs. 83 per ton on sheet not made in the United Kingdom.

These preferences may be given either by an increase of duties on foreign goods, or by a reduction of duties on the United Kingdom goods, or by a combination of both methods. The preference on the manufactures is subject to certain exceptions. It does not extend to commodities to which protective duties are applicable, to those which are free of duty at present, or to those on which, on gounds of national policy, a specially low rate of duty has been imposed.

And according to this agreement the United Kingdom undertakes the following:

- (a) To continue to give free entry to all Indian goods within the scope of the 10 per cent duty imposed by the Import Duties Act of 1932. In addition, higher British duties imposed or to be imposed on foreign goods will give India enhanced preference.
- (b) To retain the existing preferences on Barley, Peas, Beans, other Pulses and Millets, Manures, Goat-skins, and Asbestos.
 - (c) To impose a 10 per cent duty on foreign linseed.

- (d) To admit into the United Kingdom, free of duty, Shellac, Raw Jute, Myrobalams, Broken Rice, Mica and Indian hemp.
- (c) To co-operate in any particular scheme agreed to by the United Kingdom cotton industry and the Indian growers for promoting a greater use of Indian cotton by Lancashire.

The Economics of Preferential Trade. The theory of preferential trade may be briefly discussed. Preference is a deliberate interference with the free flow of foreign trade and its object is to expand it by providing it an assured channel. Preference is quite different from protection; for while the essence of protection is the discouragement of imports, the essence of preference is the encouragement of imports from a particular quarter with a view to securing a market for exports. Both protection and preference involve a temporary loss to the country adopting them, so far as the consumption of imported goods affected by them is concerned. But protection, provided it is sound, would result in the present loss to the consumers being offset by their future gain both as consumers and producers. The balancing of accounts for preference is not so simple or easy; but its acid test is to measure the advantages gained by the exporters against the losses sustained by the consumers or by the public revenues. It is obvious that preference is a handicap to the producers of non-preferred countries, and the discouragement of their products must react adversely on the exports of the country granting such preference. In evaluating a preferential trade agreement we must take into consideration the advantages enjoyed under it by the different parties. Again, a preferential trade agreement, which only diverts the channels of trade but does not expand them, must ultimately result in diminishing the total foreign trade of the world, which would obviously be detrimental to all concerned. All these factors must be taken into consideration in estimating the value of a preferential trade agreement.

The Working of the Ottawa Agreement: A. Exports from India. The main facts relating to the exports from India

are summarised in the following tables* which relate respectively to articles enjoying preference in the United Kingdom and to articles not enjoying any such preference.

TABLE I.

EXPORTS FROM INDIA OF ARTICLES ENJOYING PREFERENCE.

IN THE UNITED KINGDOM.

(In lakhs of rupees).

		1931-32	1932-33	1933-34	1934-35
To all countries		110,93	95,04	99,34	94,41
Index		100	85.7	89.6	85.1
To United Kingdom		33,30	29,73	36,48	36,71
Index	••	100	8a.3	109.5	110.2
Percentage Share		30.0	31.3	36.7	38.9
To Other Countries		77,63	65,31	62,86	57,70
Index .		100	δ4.1	81.0	74.3
Percentage Share		70.0	68.7	63.3	61.1

EXPORTS FROM INDIA OF ARTICLES NOT ENJOYING PREFERENCE IN THE UNITED KINGDOM.

TABLE II.

			(In lakhs of rupees)			
Total Exports			1931-32 46,63 100	1932-33 38,23 82.0	1933-44 48,18 103.3	1934-35 57,9 ⁸ 124.3
Exports to the linder. Percentage sl		K.	4,58 100 20.5	7,09 74.0 18.5	10,73 112.0 22.3	11,36 118.6 19.6
Exports to o countries Index	the r 		37,05 100	31,14 84.0	37,45 101.1	46,62 125.8
Percentage sl countries	nares of ot	her	79.5	81.5	77.7	80.4

^{*} Report on the Working of the Scheme of Preferences resulting from the Trade Agreement Concluded at Ottawa, pp. 3 and 4.

Some interesting conclusions can be derived from the above tables. In the case of exports from India of articles enjoying preference, the total value of the exports on the basis of 1931-32, has fallen by nearly 15 per cent.; the exports to the United Kingdom have increased slightly over to per cent.; and the exports to other countries have decreased by slightly over 25 per cent. The additional market which India has captured in the United Kingdom has been only a fraction of the market which she has lost in other countries; and the net effect on her exports trade, with reference to commodities on which preference has been given, has been a loss of 15 per cent. of trade This is the net result of preferences to certain articles of Indian export under the Ottawa agreement. In the case of exports from India of articles not enjoying preference in the United Kingdom, the total value of the exports, on the basis of 1931-32, has increased by 24.3 per cent.; the exports to the United Kingdom have increased by 18.6 per cent.; and the exports to other countries have increased by 25.8 per cent. It is a very curious and suggestive fact that while the exports of articles from India which enjoy preference have registered a decline on the whole, the exports of articles which do not enjoy a preference have registered an improvement on the whole, both in the exports to the United Kingdom and to the other countries separately. And even in the United Kingdom, while the exports of our articles which enjoy a preference have improved by 10 per cent. during 1931-35, the exports of our articles which do not enjoy a preference have improved by 18 per cent. during the same period. It is reasonable to conclude that the preference which some of our exported articles enjoy in the United Kingdom is not of very great value to our export trade, as it is obvious that in any revival of trade and industry in the United Kingdom the demand for non-preferred commodities from India is greater than the demand for preferred commodities. And we must not forget that our improved market in the United Kingdom is more than counterbalanced by a decreased market elsewhere, resulting in a net decrease of 15 per cent. of ourexports in the commodities in which the United Kingdom gives us preference.

B. Imports into India. The main facts relating to the imports into India are summarised in the following tables * which relate respectively to articles enjoying preference and to articles not enjoying preference.

Tables III.

Imports into British India of articles enjoying preference.

	(In lakhs of rupees)			
	1931-32	1932-33	1933-34	1934-35
Total Imports from all				
countries	30,78	33,33	32,52	38,42
India	100	108	106	125
Total Imports from				
United Kingdom	12,61	13,27	14,91	16,90
Indca	100	105	118	134
Percentage share of				
United Kingdom	41	40	46	44
Total Imports from coun-				
tries other than U. K.	18,17	20,06	17,61	21,51
Indea	100	110.4	96.9	118.4
Percentage share of coun-				-
tries other than U. K.	59	бо	54	56

^{*} Report on the Working of the Scheme of Preferences resulting from the Trade Agreement concluded at Ottawa, pp. 4 and 5.

Table IV.

IMPORTS INTO BRITISH INDIA OF ARTICLES ON WHICH NO PREFERENCE IS ALLOWED TO THE UNITED KINGDOM.

(In lakhe of muses)

		(iii lakiis of rupees).			
		1931-32	1932-33	1933-34	1934-35
Total imports	•••	95,59	99,26	82,84	93,84
Index		100	103.8	86.7	98.2
Imports from U. K.		32,20	35,53	32,68	36,85
Index	•••	100	110.3	101.5	114.4
Percentage share	of				
United Kingdom		33-7	35.8	39.4	39.3
Imports from ot	her				
countries		63,39	63,73	50,15	56,99
Index		100	100.5	79.1	89.9
Percentage share of oth	her				
countries		66.3	64.2	60.0	60.7

The above tables point to some interesting conclusions. In the case of imports into India of articles from the United Kingdom enjoying preference, it will be deserved that on the basis of 1931-32 the total imports have increased by 25 per cent; there has been a very substantial increase of 34 per cent. in the imports from the United Kingdom; and the imports from other countries have increased 18.4 per cent. There can be no two opinions about the fact that the preferences given by India to certain commodities from the United Kingdom have proved of a very substantial advantage to the latter country and its competitors in the Indian market have been proportionately handicaped. This fact has also been admitted by Sir Thomas Aniscough, the Senior Trade Commissioner in India, who observed in his report for 1933-34, that the preferences granted by India to certain articles of the United Kingdom proved greatly beneficial to the latter and that "it is most encouraging to note that where the Ottawa preferences have operated, the United Kingdom's relative position has been improved, and in many cases, shipments of United Kingdom's goods have actually increased in face of a greatly reduced trade."

And as for imports into India of articles on which no preference is allowed to the United Kingdom, the table reveals that on the basis of 1931-32, the total trade has declined by 1.8 per cent., imports from United Kingdom have increased by 14.4 per cent., and imports from other countries have declined by 10.1 per cent. It will be interesting to observe that while the preferred goods from the United Kingdom register an increase of 34 per cent., the non-preferred goods register an increase of 14 per cent., showing conclusively how very advantageous the preference has proved to the United Kingdom.

The Advantages and Disadvantages of the Ottawa Agreement. In studying the advantages and disadvantages of the Ottowa Agreement, it must be admitted that it is difficult to isolate the phenomena in order to study the effect of preferences as distinct from other economic causes. But in the official report* on the working of the Ottawa Agreement an extraordinary test is suggested: "If India has improved her relative position in the United Kingdom imports then, other things being equal, the preference must prima facie be deemed to be valuable. Whether India's other customers have taken relatively more from her than the United Kingdom is not quite relevant to the issue." The Ottawa Agreement is a reciprocal trade agreement, and under it each contracting party must get more or less a quid pro quo for the preferential markets which it provides to the other party. So it is not merely a question of India improving her relative position in the United Kingdom imports; the improvement must be proportionate to the improvement in the United Kingdom exports The test suggested in the official report is India. fundamentally wrong, apart from the fact that other things are very far from being equal; and the suggestion that whether India's other customers have relatively taken more from her is not relevent to the issue is equally misconceived, because after all India is primarily interested in increasing her exports in general, and not in increasing them to the United Kingdom in

^{*} Page 2.

particular. No useful purpose would be served in applying such an obviously faulty test for judging the results of Ottawa. Both India and the United Kingdom have improved their exports to the other country: Indian exports to the United Kingdom have improved during 1934-35 by 10 per cent, for preferred articles and by 18 per cent. for non-preferred articles; Indian imports from the United Kingdom have improved during 1934-35 by 34 per cent. for preferred articles and 14 per cent. for non-preferred articles. In considering the effect of preferences, we must naturally concentrate our attention on the preferred articles and then we find that as against our improvement of 10 per cent., the United Kingdom improvement is 34 per cent., and nobody can pretend that the advantages enjoyed under this agreement by the two countries are even temotely equal. Again, it is very curious to find that Indian exports of non-preferred articles to the United Kingdom have increased by 18.6 per cent. while the preferred articles have increased by 10.2 per cent. It is a fair inference that India does not stand to gain much out of the preference, and with the gradual improvement of the trade and industry in the United Kingdom, our exports of preferred articles to the United Kingdom would tend to increase even without the preference. And what is the position of the United Kingdom in this respect? While our preferred imports from the United Kingdom have increased by 34 per cent., the non-preferred imports have increased by 14 per cent. This shows very clearly that preference has helped United Kingdom imports into India very substantially. It is transparently clear that the advantages enjoyed under the Ottawa Agreement by India and the United Kingdom are totally unequal and the agreement therefore cannot be called a reciprocal trade agreement.

And what has been the effect of the Ottawa Agreement on our exports to foreign countries? While the Ottawa Agreement is an important factor affecting these exports, it is not the only factor; and it is not possible to isolate the effects of Ottawa Agreement on our exports to foreign countries. But while the exact causes are difficult to determine, the net results are clear

and unambiguous. While the index of our exports (which enjoy preference in the United Kingdom) to foreign countries has fallen by 25.7 per cent., the index of our exports (which do not enjoy preference in the United Kingdom) to foreign countries has increased by 25.8 per cent. during 1034-35. It is reasonable to infer that a part of our normal exports to foreign countries have been diverted to the United Kingdom by means of preferences, and it is difficult to understand how that can be beneficial to India. When it is more difficult for foreigners to sell vertain commodities in India, on account of the preference given to the United Kingdom, it is only natural to conclude that they would be less inclined and less able to buy Indian goods, apart from any specific restrictions on Indian goods which may or may not exist in these foreign countries. We cannot subscribe to the view that the Ottawa Agreement has not resulted in restrictions on Indian exports, and that whatever restrictions have been imposed by foreign countries on Indian exports have been done merely as a matter of domestic policy, and not as a retaliatory measure against the Ottawa Agreement and its restrictions on foreign exports. The Ottawa Agreement must inevitably be a factor in the consideration of the domestic policy of every important foreign country. The net conclusion is that while Indian exports to the United Kingdom have increased, her exports to foreign countries have decreased far more; ()ttawa has undoubtedly benefited the United Kingdom to a far greater extent than it has benefited India, if it has done so at all; and that it is not in the interest of India to continue this agreement which is not reciprocal and which is injurious to her exports to foreign countries who are her best customers. The interests of India would be best promoted by fair and equitable bilateral trade agreements. By stimulating the foreign trade of India in a single channel with the United Kingdom, which the Ottawa Agreement aims at doing, the benefits of foreign trade are reduced to their minimum and not increased to their maximum. In the best interests of India the Ottawa Trade Agreement must be terminated.

Conclusion. On 30th March 1936, the Legislative Assembly passed the following resolution moved by Mr. M. A. Jinnah:

This Assembly recommends to the Governor-General in-Council that the Ottawa Agreement dated 20th August, 1932, be terminated without delay and notice of its denunciation be given in terms of article fourteen thereof. The Assembly further recommends that the Government of India should immediately examine the trend of the trade of India with various other important countries and the United Kingdom, and investigate the possibility of entering into such bilateral trade treaties with them whenever and wherever possible to bring about an expansion in the export trade of India in those markets, and submit such treaty or treaties for the approval of the Assembly.

This resolution was passed by an overwhelming majority of the elected representatives of the people of India* and has the most cordial approval and support of the accredited representatives of Indian commerce and industry. The Federation of Indian Chambers of Commerce and Industry, which is the accredited spokesman of Indian commercial and industrial interests, at its annual sessions at Delhi in April 1936, unanimously passed the following resolution: "The Federation congratulates the Legislative Assembly for passing a resolution terminating the Ottawa Agreement against which the Indian commercial community has all along protested, and records its appreciation of the patriotic action of all members of the Legislative Assembly who voted for it." We venture to express our opinion, that the resolution not merely voices Indian public and commercial opinion, but is best calculated to promote Indian interests. We have already shown in detail

^{*} Though the resolution was carried in the Assembly by 70 to 65, the the minority was largely composed of official and nominated members, with comparatively very few elected representatives; while the majority consisted with one exception of elected representatives.

that the Ottawa Trade Agreement is very defective, one-sided and detrimental to Indian trade interests: the Indo-British Trade Agreement is, from our point of view, much worse than the Ottawa Agreement; and both should be terminated forthwith. The second part of the resolution, which asks for bilateral trade agreements, is equally sound. India, as a large importer of manufactured goods and an exporter of raw materials and semi-manufactured goods, occupies a strong position in international trade; and the Indo-Japanese Trade Agreement is ample evidence of the advantages to India of a bilateral trade agreement. A simple illustration will make this point clear beyond any shadow of doubt. During 1034-35 Japan sold. in accordance with the Indo-Japanese Trade Agreement, 400 million yards of cloth in India and purchased 2 million bales of cotton, half a million bales being above the contracted rate. As against that Lancashire sold 553 million yards of cloth and purchased 347,000 bales of cotton. And yet during the Ottawa debate we were solemnly warned that unless the agreement was ratified, the consumption of Indian cotton in Lancashire would go down to the detriment of India! We have a bilateral trade agreement with Japan and we have no bilateral trade agreement with Laucashire. And vet in his speech before the Associated Chambers of Commerce on 16th December 1935, Lord Willingdon said:

It has been their (the Government of India's) concern to examine whether the time has vet come to abandon India's traditional foreign trade policy, based as it is on reciprocal most-favoured-nation treatment, in favour of the now popular method of bilateral negotiation. but I would affirm that nothing in the study of world economic conditions in the past few years, or in India's present circumstances, has shown that any departure from our accepted policy is necessary.

The above statement reveals clearly how completely divorced is the policy of the Government of India from the wishes and interests of Indian public and commercial opinion. It must be admitted that a bilateral trade agreement between India and the United Kingdom would not be in the interests of the latter, and in the case of cotton cloth and raw cotton, either our import of cloth from Lancashire would have to decrease very substantially,

or our export of raw cotton to Lancashire would have to increase equally substantially. And in this, as in other respects, the Government of India voices the wishes and interests of the United Kingdom. We would affirm that India would not find any serious difficulty in negotiating advantageous trade agreements with foreign countries, and to say that it would entail the calling of a world economic conference is ridiculous and contrary to facts. The United Kingdom has negotiated bilateral trade agreements, without calling any world economic conference for the purpose, with the following nineteen countries. Argentine, Brazil, Denmark, Estonia, Finland, Germany, France, Ireland, Italy, Latvia, Lithunia, Netherlands, Norway, Rumania, Sweden, Turkey, Soviet Russia, Poland, and Uruguay. And India too could successfully negotiate trade agreements without difficulty, as instauced by the Indo-Japanese Trade Agreement. But the crux of the matter is that in that case the Indian market cannot be maintained as a preferential market for British goods; and the Government of India, as a subordinate branch of the British Government, therefore oppose bilateral trade agreements for India as not being in India's interests, though as a matter of fact they are not in the interests of the United Kingdom.

II. Indo-British Trade Agreement.

The Principle Clauses of the Agreement. The Indo-British Trade Agreement was signed on 9th January 1935. It is supplementary to the Ottawa Trade Agreement and operates during the continuance of the latter. Its principle clauses are as follows:

- (a) It is recognized by His Majesty's Government in the United Kingdom and the Government of India that the conditions within industries in India, in the United Kingdom and in foreign countries may be such that an Indian industry requires a higher level of protection against foreign goods than against imports of United Kingdom origin.
- (b) The Government of India undertake that the measure of protection to be afforded shall be only so much as, and no more than, will equate prices of imported goods to fair selling prices for similar

goods produced in India, and that, wherever possible having regard to the provisions of this Article, lower rates of duty will be imposed on goods of United Kingdom origin.

- (c) The differential margins of duty established in accordance with the principles laid down in the preceding clauses as between United Kingdom goods on the one hand and foreign goods on the other, shall not be altered to the detriment of United Kingdom goods.
- (d) When the question of the grant of substantive protection to an Indian industry is referred for enquiry to a Tariff Board, the Government of India will afford full opportunity to any industry concerned in the United Kingdom to state its case and to answer the cases presented by the other interested parties. The Government of India further undertake that, in the event of any radical changes in the conditions affecting protected industries during the currency of the period of protection, they will, on the request of His Majesty's Government or of their own motion, cause an enquiry to be made as to the appropriateness of existing duties from the point of view of the principles laid down above, and that, in the course of such enquiry, full consideration will be given to any representations which may be put forward by any interested industry in the United Kingdom.
- (c) His Majesty's Government in the United Kingdom will give consideration to the steps that might be taken in co-operation with the respective commercial interests to develop the import from India of raw or semi-manufactured materials used in the manufacture of articles of a class which, on importation into India, are subject to differential protective duties.

In a supplementary exchange of notes His Majesty's Government in the United Kingdom undertake that if at any time any further or other special steps are taken by the Colonies and Protectorates to facilitate the sale of United Kingdom cotton goods in competition with foreign cotton goods, they will invite the Governments of the Colonies and Protectorates to accord as favourable treatment to Indian cotton goods of any description as may be proposed for similar United Kingdom cotton goods. And the Government of India undertake that as soon as the second surcharge comes off as a general measure, the tariff rates on United Kingdom cotton piece goods will be reduced to 20 per cent ad valorem or 3½ annas per pound on plain grey goods, and 20 per cent ad valorem on other goods, provided that on expiry of the period of the agreement of 28th October, 1933, between the Lancashire Delegation and

the Millowners' Association, Bombay, the duties on United Kingdom goods for the remaining period of protection will be fixed on a review of conditions then existing, and in the light of such experience as may have been gained.

A Review of the Agreement. A review of the Indo-British Trade Agreement need not detain us long. It is transparently clear that the agreement is entirely one-sided, the United Kingdom gains substantial advantages from it, and India definitely stands to lose heavily from it. India undertakes to grant to imports from the United Kingdom a preference; she undertakes that the measure of protection granted to her industries will be only to such as, and no more than, will equate prices of imported goods to fair selling prices for similar goods produced in India; she undertakes that when the question of the grant of a substantive protection to an Indian industry is referred for enquiry to a Tariff Board, full opportunity will be afforded to any industry concerned in the United Kingdom to state its case and to answer the cases presented by the other interested parties; and she also undertakes that, in the event of any radical changes in the conditions affecting protected industries during the currency of the period of protection, she will, on the request of the British Government or of her own motion, cause an enquiry to be made as to the appropriateness of existing duties from the point of view of the principles laid down above, and that, in the course of such enquiry, full consideration will be given to any representations which may be put forward by any interested industry in the United Kingdom. These are very substantial and heavy undertakings with far-reaching effects on the economic life of the country. This Agreement smashes the Fiscal Autonomy Convention to pieces and the policy of discriminating protection is seriously undermined. And the underlying assumption of the Agreement is that India must continue to export raw materials and semi-manufactured goods and in return import manufactured goods from the United Kingdom; in other words, she must remain an appendage to the industrial requirements of the United Kingdom. There is not even a pretence of an adequate return to India for the heavy sacrifices she makes, for the maximum commitment of the other party to the agreement is that, "His Majesty's Government in the United Kingdom will give consideration to the steps that might be taken in co-operation with the respective commercial interests to develop the import from India of raw or semimanufactured materials used in the manufacture of articles of a class which, on importation into India, are subject to differential protective duties." (Italics ours). There can be hardly any doubt that the agreement has been imposed upon India on account of her political subjection to Britain; and as a matter of fact to call it an "agreement" is a misnomer. Indian public opinion in general, and commercial opinion in particular, has been strongly opposed to this so-called agreement, and in the memorandum on the subject dated 8th February, 1936, submitted by the Indian Chamber of Commerce, Calcutta, to the Government of India, the Chamber characterizes the agreement as "nothing short of an outrage" upon Indian public and commercial opinion. It is significant that the agreement was signed by the Government of India, which is a subordinate branch of the British Government, without consulting Indian public or commercial opinion; and it was rightly turned down by the Legislature in its sessions at Delhi in January 1935. While the Ottawa Agreement is bad enough, the Indo-British Trade Agreement is very much worse; and it is a matter of great satisfaction that in its Delhi sessions in March 1036 the Legislative Assembly has denounced the Ottawa Agreement (which includes the Indo-British Trade Agreement) and the Government of India has promised to carry out the wishes of the Assembly and to give the necessary six months' notice for its termination. The Federation of Indian Chambers of Commerce and Industry, which is the accredited spokesmen of Indian commercial and industrial interests, in its annual session at Delhi in April 1936 unanimously passed the following resolution: "The Federation congratulates the Legislative Assembly for passing a resolution terminating the Ottawa Agreement against which the Indian commercial community has all along protested, and records its appreciation of the patriotic action of all members of the Legislative Assembly who voted for it." We trust both the Ottawa and the Indo-British Trade Agreements are killed and the strong Indian opinion about them will be respected and carried out in a straightforward fashion.

III. Mody Clare-Lees Agreement.

How it was negotiated. The Mody Clare-Lees Agreement is one of the most extraordinary trade agreements that has ever been negotiated. This agreement between India and the United Kingdom was not negotiated by the official representatives of the two countries, but by a non-official British Textile Delegation and the Bombay Millowners' Association, which represents appreciably less than half the cotton textile interests in India. It is obviously unfair to the major section of the Indian industry that a trade agreement should be negotiated over its head; and it is inconceiveable that such an agreement would have been negotiated, or that the Government of India would have accepted it, if it were not a subordinate branch of the British Government. In other words, it is not a trade agreement pure and simple, and political considerations have played an important part both in its negotiation and its acceptance. And we would go further and say that so long as India continues to be ruled by Britain, the two parties to the agreement cannot possibly negotiate on equal terms, and under these circumstances we cannot imagine a trade agreement in which the advantages and the sacrifices of the two parties would be perfectly equal. An essential condition of a fair trade agreement is that the parties to it should negotiate on perfectly equal terms; and an undue pressure exercised by one party would vitiate the so-called agreement at its very source.

The Principle Clauses of the Agreement. The agreement was signed in October 1933 and ends on 31st December 1935. The following are its principal clauses:

(a) The Indian cotton textile industry is entitled for its progressive development to a reasonable measure of protection against the imports of the United Kingdom yarns and piece-goods. It was also agreed

that under the present conditions owing to the lower costs and other factors operating in foreign countries the industry required a higher level of protection against them, than against the United Kingdom.

- (b) As regards cotton piece-goods, it was agreed, that if and when the revenue position of the country made it possible for the Government of India to remove the general surcharge on all imports imposed in October 1931, the Indian side would not make fresh proposals with regard to the duties applicable to the United Kingdom imports.
- (c) In the matter of cotton yarns, the Indian side has agreed that so far as imports from the United Kingdom are concerned, the duty may be 5 per cent. ad valorem with a minimum specific duty of one and quarter annas per pound.
- (d) So far as artificial silk piece-goods are concerned the Indian side has agreed that in the case of the United Kingdom the duties may be as follows: 30 per cent. ad valorem or two and half annas per square vard for hundred per cent. artificial silk fabrics; and 30 per cent. ad valorem or two annas per square yard for mixture fabrics of cotton and artificial silk
- (e) In so far as the empire and other overseas markets for piece-goods and yarns are concerned, it is agreed that any advantages which might be arranged for British goods should be extended to Indian goods, and that India in markets in which she has no independent quota should participate in any quota which might be allocated to the United Kingdom. In respect of overseas markets in which Indian mills lack established connections, it is agreed that the Manchester Chamber of Commerce should use its good offices to bring about contacts between the Indian manufacturers and the British houses which are already established in those markets.
- (f) In regard to raw cotton, the Indian side strongly emphasised the urgent necessity of further efforts being made in the United Kingdom to popularise and promote the use of Indian raw material. They welcome the undertaking that the British textile mission would be prepared to recommend effective action being taken and keep the Indian side regularly in touch with developments. It was further agreed that other avenues of co-operation in this field should be explored in the interests of the Indian cotton-grower.

A Scrutiny of the Agreement. Even a casual scrutiny of the agreement reveals quite clearly that the agreement is entirely one-sided and that the advantages and sacrifices of the two parties under it are totally unequal. Under this agreement, a reasonable measure of protection against the imports of the

United Kingdom yarns and piecegoods is not a matter of right in accordance with the Fiscal Autonomy Convention, but is granted as a concession by the British Textile Delegation. India undertakes to grant a substantial preference to British cotton piecegoods; and she undertakes not to impose higher duties to the imports from the United Kingdom, if and when the general surcharge on all imports imposed in October 1931 is removed. And what does she gain in return for these undertakings? The main consideration from the Indian point of view would be the consumption of Indian cotton, and in this connection the British Textile Delegation would recommend a greater use of Indian cotton (it is significant that British undertakings are in the form of recommendations and are delightfully vague and non-commital); and a sop is thrown to India in the shape of establishing connections between Indian manufacturers and British commercial houses in the overseas markets, and India sharing the advantages extended to Britain in the empire and overseas markets. Nobody attaches any excessive importance to these ornamental clauses of the agreement. The conclusion cannot be resisted that the agreement cannot be justified on any grounds of equity or recuprocal benefits; and Indian public opinion in general, and commercial opinion in particular, has strongly condemned the agreement and viewed it as a manifestation of foreign political domination. It is to be hoped that we have seen the last of these non-official trade agreements.

IV. Indo-Japanese Trade Agreement

The Genesis of the Indo-Japanese Trade Agreement.

The genesis of the Indo-Japanese trade agreement was the importing into India of a large and increasing volume of cotton piecegoods from Japan against which the Indian producers were quite unable to compete. The depreciation of the yen is the reason generally put forward as an explanation of the inability of the Indian cotton manufacturers to compete against the Japanese, in spite of the many natural advantages which they enjoy in the shape of buying their cotton and selling their

produce in the home market. But while the depreciation of the yen is a factor in the situation, we must not let it make us lose sight of the fundamental fact that the Japanese industry is far better organized than the Indian industry, and above all the labour cost of the Japanese producer, as compared to the Indian producer, is very substantially lower. In his oral evidence before the Whitley Commission Sir (then Mr.) H. P. Mody gave the following figures relating to the comparative labour efficiency: "In Japan a weaver minds six looms and efficiency there is ninety-five per cent. In China a weaver minds four looms and efficiency is eighty per cent. In Bombay a weaver minds two looms and efficiency is eighty per cent. Calculated on the basis of Japan and China a weaver in Bombay is paid between 200 and 300 per cent. more than a weaver in Japan or China." The labour cost is a major factor in the cost of production of cotton piecegoods; and the high labour cost of the Indian manufacturer, as compared to the Japanese manufacturer, helps us to understand his inability to compete against the Japanese. It is not necessary here to discuss the causes or the possible remedies of the comparative inefficiency of Indian labour as we have discussed it in detail in the chapter on "Industrial Labour". But here it may be permitted to observe that the policy of more or less indifference to this vital issue which has been pursued both by the government and the employers in India is not calculated to solve this crucial problem, on which the ultimate future of Indian industry depends. The Japanese cotton industry came into existence after the Indian industry had taken a start; and it is a matter of national disgrace that with all the natural advantages which the Indian industry enjoys, it cannot compete with the Japanese industry even in its home market and requires a very substantial protection against it.

The Important Clauses of the Agreement. The agreement was concluded in July 1934 and shall remain in force till March 1937. Six months' notice by either party is necessary for the termination of the agreement, which shall remain in force indefinitely after March 1937 until either party gives such

a notice. The customs duties to be imposed on importation into India of cotton piecegoods manufactured in Japan shall not exceed 50 per cent. ad valorem or 51/4 annas per pound, whichever is higher, on plain greys; and 50 per cent ad valorem on others. If hereafter the Government of India should decide to impose a specific duty on cotton piecegoods other than plain greys, it will not impose on such piecegoods from Japan a specific duty exceeding 51/4 annus per pound. If in any "cotton year" (beginning from 1st January) one million bales of raw cotton are exported from India to Japan, the quantity of cotton piecegoods which may be exported from Japan to India in the corresponding cotton piecegoods year (beginning from 1st April) shall be a basic allotment of 325 million yards. If the exports of raw cotton from India to Japan in any cotton year are less than one million bales, the allotment of cotton piecegoods for the corresponding cotton piecegoods year shall be the basic allotment diminished by 2 million yards for every 10,000 bales of the deficit or for any residual quantity thereof exceeding 5,000 bales. If the exports of raw cotton from India to Japan in any cotton year exceed one million bales, the allotment of cotton piecegoods for the corresponding cotton piecegoods year shall be the basic allotment increased by 11/2 million yards for every 10,000 bales of the excess or for any residual quantity thereof exceeding 5,000 bales; provided that the allotment of cotton piecegoods shall not in any case exceed 400 million yards for any cotton piecegoods year. If the exports of raw cotton from India to Japan in any cotton year exceed 11/2 million bales, the excess shall be added to the quantity of raw cotton exported from India to Japan in the following cotton year, for the purpose of determining the allotment of cotton piecegoods for that year. Any raw cotton or cotton piecegoods, which have been imported and then re-exported, shall be excluded from these calculations. If less than the allotment for any cotton piecegoods year is exported from Japan to India in that year, the quantity of the deficit up to a quantity not xceeding 20 million yards may be exported in the first half of the following cotton piecegoods

year in addition to the allotment for that half-year. And a quantity not exceeding 20 million yards of cotton piecegoods may be exported from Japan to India in addition to the allotment for that year; but such excess shall be deducted from the allotment for the first half of the following cotton piecegoods year.

The Basis of the Agreement. It will be observed that the essence of the agreement is that the customs duties on the imports of Japanese piecegoods are limited to 50 per cent. ad valorem or 51/2 annas per pound, whichever is higher; Japan agrees to buy normally one million bales of Indian raw cotton: and in 'eturn Japan is allowed to sell 325 million yards of cotton piecegoods in India. In negotiating the agreement India was anxious to provide for the sale of its raw cotton and to restrict the import of Japanese piecegoods into the country, and Japan was anxious to provide for the sale of its cotton piecegoods; and the quantities and the rate of the customs duties on Japanese piecegoods were fixed by negotiation and mutual adjustment. To a detached observer it strikes as rather anomalous that while the Government of India has made a sustained effort to arrange for the sale of Indian raw cotton and to restrict the imports of Japanese piecegoods in the country, it has made hardly any sustained effort, barring the imposition of certain protective duties, to stimulate the manufacture of 1aw cotton into piccegoods in India, which would solve both the problems of the consumption of Indian raw cotton and the restriction of imports of foreign piecegoods into India. Covernment of India, as a subordinate branch of the British Government, cannot help being very sensitive to the needs of Lancashire: and a real stimulus to the manufacture of cotton piecegoods in India would react unfavourably on Lancashire. But meantime Iapan is reaping the benefit of the combined political and economic weakness of India. If it is to be assumed that India must necessarily export raw cotton and import cotton piecegoods,—a very large and, in our opinion, a thoroughly mischievous assumption, even for the time beingin that case the Indo-Japanese agreement may be pronounced

to be a fair agreement which is mutually beneficial. Incidentally it may be observed that in negotiating with Japan the Government of India, freed from the incubus of political subordination which it displayed in connection with Britain, negotiated efficiently in the best interests of the country, Τt strong position which it utilised held in national interests, and the imports of piecegoods from Japan is conditional on the export of cotton to Japan, and not on any promises to increase the comsumption of Indian cotton as in the case of Lancashire. Again, the protection given to the Indian industry against Japan is far stiffer than against Lancashire. Thirdly, the maximum of cotton piecegoods that can be imported from Japan to India is, unlike the imports from Lancashire to India, clearly specified. The preference to Lancashire at the expense of the Indian taxpayer and the cotton manufacturer is part of the price which India pays for the privilege of being governed by Britain.

The Working of the Agreement.* The exports of raw cotton from India to Japan, less re-exports from Japan, amounted to 2,053,534 bales in 1934. The gross imports into India of cotton piecegoods from Japan from 8th January 1934 to 31st March 1935 amounted to 459 million yards, out of which 58 million yards were re-exported, leaving a balance of 401 million yards as net imports. It is very instructive to compare these figures with our trade with Lancashire which during 1934-35 sold 553 million yards of cloth in India and bought 347,000 bales of Indian cotton, apart from the loss to our public revenues by the substantially lower duties on Lancashire goods. According to the agreement, the excess of 553,534 bales of raw cotton is to be added to the quantity of raw cotton exported from India to Japan in the cotton year 1935, for the purpose of calculating the piece-goods allotment for the year commencing 1st April 1035.

^{*} Review of the Trade of India (1934-35), p. 172.

CHAPTER XXIV.

UNEMPLOYMENT.

In this age of regional specializa-Varieties and Causes. tion and economic interdependence in which there is no national and international economic planning, production cannot always be adjusted to demand, with the result that each industry and each country has its periods of boom and depression-and unemployment is the inevitable consequence of depression. Unemployment which is due to this periodic lack of adjustment between production and consumption is naturally of a temporary character. Secondly, the introduction of labour-saving machinery may throw workers out of employment-until the expansion of productive activities in other directions brings about their gradual re-absorption. Thirdly, the machinery of production may experience a temporary breakdown—owing to strikes and lockouts in the case of manufacturing industries and floods and droughts in the case of agriculture—and workers may be thrown out of employment for varying lengths of time. And, lastly, the extent of productive activities in a country may not be adequate enough to offer employment to large masses of population, with the result that unemployment may take a permanent form, and may even assume menacing proportions.

All these four varieties of unemployment are found in India, but in different proportions. As India has so far been industrialized only to the extent of meeting a small part of her requirements in the matter of manufactured articles, supply can hardly undertake demand even in times of acute economic depressions, so that the problem of unemployment is more or less completely absent in the case of organized industries. In the case of handicrafts, on the other hand, there is wide-spread unemployment of both permanent and temporary characters. As we have seen in a previous chapter, with the

gradual development of communications, handicrafts have been losing ground, with the result that skilled craftsmen have been forced to look round for other means of earning a livelihood. But as in the case of handicraft products supply and demand have adjusted themselves, any disturbance in demand, consequent upon the shrinkage of general purchasing power, has its reactions upon supply with consequent unemployment among the workers-much in the same manner as the periodic lack of adjustment between production and consumption brings about unemployment in the case of organized industries in foreign countries. As regards unemployment consequent upon the introduction of labour-saving machinery. it may be said that as the productive capacity of Indian industrial establishments is still far below the requirements of the country, the introduction of labour-saving machinery is generaly followed by the extension of productive activities, so that this factor has not been the cause of unemployment among the industrial workers. But there are strikes and lockouts which put industrial machinery out of gear temporarily and bring about unemployment among the workers; this type of unemployment, however, needs no remedial measures: all that the State has to do in such cases under the present organization of society is to see that the employer does not take undue advantage of the weakness of the worker. But different is the case when agricultural operations are brought to a standstill over wide areas in consequence of draught or floods and as a result millions of people not only find themselves out of employment but actually in a state of profound misery and distress. Unemployment of this variety would undoubtedly call for effective remedial measures.

It is, however, unemployment which is due to lack of opportunities for work which is the most difficult to combat owing to its magnitude. Unemployed artisans, of whom there must be a fairly large number in the country, belong to this class; then there are millions of unskilled workers who cannot find employment in towns or villages; and, lastly, there is an army of educated unemployed of all descriptions who find all

the sources of employment in the country dried up. Our task in this chapter, therefore, is to find out the causes and extent of unemployment among handicraftsmen, agriculturists, unskilled labourers and educated men of various classes, and to see what measures can be adopted to solve the problem.

Unemployment among skilled handicraftsmen. It is not possible to determine the extent of unemployment among handicraft workers: but seeing that the decline in handicrafts set in long ago, and that decline during recent years has been slow and almost imperceptible, the number of permanently unemployed craftsmen cannot be very large. But there must be a very large number of partially unemployed workers. We have seen that few handicrafts have any prospect of being resuscitated by modernization or otherwise on account of changes in fashion, customs and tastes, so that the employment of the workless of this class (except when they can be absorbed in factories, e.g. weavers in cotton mills) in their old occupations is a remote possibility. The prevention of periodic unemployment, due as it must be to general economic depression, would be an equally hopeless task—unless economic depressions themselves are to be prevented by careful economic planning. How ever, something may be done by organizing production and marketing (both at home and abroad) on more up-to-date lines, thus giving some sort of stability to these occupations; but no amount of organization on these lines is likely to solve the problem of unemployment among handicraftsmen in toto. true and lasting remedy would appear to lie in the development of suitable organized industries; but as these industries can be established only at certain well-defined places, and as of all things human beings are the most difficult to transport. it would be wise not to pin too much faith in this remedy either. All things considered it seems that a large proportion of unemployed handicraftsmen are doomed to pass their days as unskilled labourers.

Rural Unemployment. The rural population of India may be divided into two main classes, viz., the cultivators who have some right in the land they cultivate, and landless

labourers. It is mainly the landless labourers and poorer rightholders who provide unskilled labour in towns, so that the problem of unemployment among unskilled town labourers and agricultural population is inextricably mixed up together. Unemployment in rural areas is of three kinds: unemployment during the off-season when there are no agricultural operations to be carried on; unemployment due to natural calamities such as floods and prolonged drought; and general unemployment. As we have already seen in a preceding chapter, the problem of off-season unemployment is not easy to solve on account of the vast numbers of unemployed persons and the long period of unemployment, especially as there are no suitable bye-occupations to keep millions of people busy during the whole of this period of enforced idleness. Floods and drought and consequent famines are of a periodic character, so that their evil effects can be mitigated not so much by opening new avenues of employment as by taking steps to prevent these calamities and by organizing an efficient system of relief. A good deal has been done to provide irrigation facilities in various parts of the country, but considering the magnitude of the problem and the limitation of artificial irrigation over a large part of the country, agriculture as a whole will probably never be immune from the evil effects of drought, so that it will be necessary to provide relief to the famine-stricken areas. But little has so far been done to prevent floods in the areas where they occur with clockwise regularity and where moreover, they are preventable. The system of famine relief, however, which has been in force in its present form since 1901, is not altogether inadequate, although much can be done to improve the lot of the sufferers and to ensure the return to normal conditions with as little hardship and delay as possible. Before the introduction of the Montagu-Chelmsford Reforms, both Central and Provincial Governments were responsible for famine relief; but since 1922 provinces have been made wholly responsible for this work by making it obligatory upon them to contribute annually to the Famine Insurance Fund amounts which have been fixed for each province in proportion to its liability to famine. If a province happens to accumulate in the Fund a sum equal to six times its annual contribution, it is entitled to stop further contributions. The provincial balances in Famine Insurance Fund may be utilized by the provinces concerned for famine relief, or for the construction of works for the prevention of famines either independently by the Government or through the cultivator by granting him loans from this fund. However, while funds are always available for famine relief, the machinery for relief is constantly kept in a state of readiness. Programme of relief work for different areas is always ready, and the machinery, in theory at least, is set in motion immediately after the first signs of distress appear on the horizon. Revenue collection in the distressed areas is suspended and village officials are directed to prepare a list of persons in need of assistance. Then comes the opening of relief works in order to provide temporary employment for the people in need. Those who are unable to work-such as children and old and disabled persons-are given gratuitous relief in relief camps. These relief works are closed down with the arrival of the next rainy season, and people are sent back to their villages. In order to enable them to start agricultural operation again, advances are made to the cultivators for the purchase of seed, cattle etc. Meanwhile, relief work continues, and is discontinued only when the autumn crops are ready. As a result of these elaborate preparations and relief measures the old dread of famines as the harbingers of starvation and death has now completely disappeared, so that famines have now come to be regarded as periods of scarcity during which agriculture can no more give employment to those who depend upon it for their livelihood. As a universal famine is an unheard of occurrence, and as under the existing organization of transport supplies can easily be rushed from other parts of the country as well as abroad to the famine-striken areas, famines now mean not the scarcity of food as formerly but the scarcity of purchasing power and the dislocation of agricultural production through the lowering of the vitality of the agriculturist and his animals, as well as in many cases the scarcity of seeds after the failure of crops.

However, these famines will be with us so long as such a large percentage of the population is dependent upon agriculture and agriculture in the country means dependence manly upon rainfall, and until the condition of the cultivator and the rural labourer does not improve to such an extent as to enable them to tide over these difficult times without being entirely dependent upon extraneous help.

But while drought and floods create occasional unemployment, the steady increase in population without a corresponding expansion in the area under cultivation or the employment of more intensive methods of cultivation has created a situation that has no parallel. As on a given holding only a certain number of men can be profitably employed under a given system of cultivation, the increase in population has brought about a superfluity of labour, for which the country has no outlet. Thus there are tens of millions of able-bodied workers who are, strictly speaking, not employed in any productive pursuit, and yet about whom we know little and hear nothing. But for the joint family system, these tens of millions of unemployed would have brought the State face to face with a problem of the first magnitude: for their demand for work and bread could have been irresistible.

But even as it is, we are not far distant from a real catastrophe. We have seen that the population of India is rapidly increasing, and that (unless something unforescen in the shape of a sidespread epidemic happens) it is expected to touch the 400 million mark in the beginning of the fortics of this century. As we cannot divide a given quantity of food ad infinitum something will have to be done to solve this problem of unemployment sooner or later, and the sooner it is done the better. The question arises: what should that something be? The answer is: the State must provide new avenues of employment. We have seen in preceding chapters that the exploitation of India's vast natural resources has hardly begun yet. There are mines and forests which are still awaiting development and exploitation on scientific lines. Then there are manufacturing industries in regard to the exploitation of whose possibilities

India has not yet gone beyond the stage of scratching the surface. But it must not be forgotten that the development of those forests, mines, and manufacturing industries in general would be worse than useless unless the purchasing power of the masses improves substantially; and these masses constitute the rural population. The conclusion is obvious: as in other spheres, so in the field of unemployment the solution lies in the execution of a well laid out plan of general economic development. So long as the problem of economic development is not tackled on all sides and simultaneously, the problem of unemployment in India will never be solved—indeed, it is likely to become more acute with the passage of time.

Unemployment among the educated classes: its growth and causes. Another class whom unemployment has brought into prominence during recent years is the educated class. Some idea of the magnitude of the problem may be had from the following figures:*

	1921-22	1931-32
Number of Scolars receiving University education in Arts and Science		
Colleges	45,933	81,010
Number of Scholars receiving University education in Professional		
Colleges	13,662	18,483
Number of Scholars in High and		
Middle Schools	1,239,524	2,297,519
Number of Scholars in Special Schools		
receiving technical and professional		
education		
These figures illustrate recent trends	in education	in India.

These figures illustrate recent trends in education in India. But in this connection it is well to remember that even in the years immediately preceding the war the problem of unemployment among the educated classes was present to a certain extent in India. Even, however, if we assume for the sake of argument that before the war unemployment was unknown

^{*} Stalistical Abstract (1934-35), P.

among the educated classes, and that this state of affairs prevailed right up to the beginning of the twenties (which was of course by no means the case), the fact that during the decade 1921-31 the number of scholars receiving the university, high school, middle school and technical and professional education has increased by nearly 90 per cent, makes us realize the magnitude of the problem today. The problem of unemployment among the educated classes would have been absent only if the avenues of employment had expanded exactly in proportion to the increase in the number of persons receiving education. The avenues of employment for the educated classes are offered by the various State departments, industry, agriculture, transport and commerce. The State can employ only a certain number of people at any given time according to the extent of its activities; and (in the absence of more reliable data) taking into account Government expenditure on various services (excepting debt service and railways) in 1921 and 1931 we cannot but come to the conclusion that, as compared with the former year, the State was employing only about 10 per cent, more hands in the latter year. Industries have made some progress during this period; but even if we forget all about the effects of rationalization and improvements in organization, and gauge the capacity of industry to offer employment to educated men exactly according to the amount of capital invested in it, we come to the conclusion that the capacity of industry to offer employment has increased by less than 20 per cent. during the decade; and these conclusions are also applicable to commerce and transport. As regards agriculture, it may be said that as no changes of any significance have taken place in its organization during the decade, its capacity, or rather incapacity, to employ educated men is the same to-day as it was in 1921. In the absence of data it is not possible to hazard a conjecture as to the total all-round increase in the capacity of the country to give employment to educated voungmen during the decade under consideration; but taking everything into consideration it seems that it has not improved by more than 15 per cent., and in all probability it is substantially less. The

conclusion is obvious: thousands of educated youngmen are being annually turned out by educational institutions in India whom the country cannot offer any kind of employment, and the number of these men is increasing year after year.

Government Inquiries on uneployment among the educated classes. The problem of educated class unemployment had already become sufficiently serious during the early 'twenties to demand investigations in certain provinces. Naturally, in this field Bengal led the way. A Committee was appointed in 1922 to investigate the problem of unemployment among the educated middle classes of Bengal and to suggest remedial measures. The improvement and extension of certain cottage industries was all that this Committee could think of; and, as shown by the letter of the Director of Industries, Bengal, to the United Provinces Unemployment Committee (1935), the outcome of this has been that "four hundred and four otherwise idle and unemployed Bhadraloks have had the advantage of a practical career and outlet for improving the technique and craftsmanship of new or existing cottage industries of their country. Of this number 165 have given tangible evidence of having actually found definite employment in the industries in which they have been trained."* That is how Bengal is trying to solve the problem of middle class unemployment !

In 1926, on a resolution moved by the late Mr. A. Rangaswami Iyengar, the problem of unemployment among the educated classes was discussed in the Legislative Assembly, but the Government refused to enduct an inquiry in the matter on the plea that it was desirable to give the Provincial Governments a free hand to deal with the problem. Again, two years later, the matter was discussed in the Council of State, and once again the Government refused to appoint a Central Committee much on the same grounds as it had done two years earlier. As we shall see presently, without the active co-operation of the Central Covernment no Provincial Government can success-

^{*} See Report of the United Provinces Unemployment Committee, P. 14.

fully tackle the problem of unemployment—and the Government of India has been consistently evading its responsibility in the matter.

But the upshot of debates in the Legislative Assembly and Council of State was that Committees of Inquiry were appointed in some of the provinces to inquire into the problem of middle class unemployment. The United Provinces Committee, which was, appointed in 1927, had nothing more constructive to recommend than the establishment of employment bureaus at Allahabad, Lucknow, Cawnpore and Agra at a cost of Rs. 200 per mensem for each bureau. Even this cheap recommendation was never acted upon by the Government. In the same year the Punjab Government also appointed a Committee of Inquiry. This Committee had something more constructive to offer. They thought that the difficulties of the educated unemployed were due to the prevailing system of education that left no alternative for a scholar but to pursue his studies aimlessly to higher standards regardless of his financial means and mental capacity. They, therefore, recommended that the system of education should be overhauled in such a manner as to divert scholars at an early stage of their career into those channels where their education and training would be of some help to them in carning a livelihood. But the Government did little to implement these recommendations, so that the system of education to-day is as defective as ever, and the problem of middle class unemployment has in the meanwhile become more acute. In Bombay, too, in the same year the Government carried out an inquiry through the Director of Information and Labour Intelligence, who in his report dwelt more or less upon the difficulties of collecting any reliable information about the middle class unemployment. The Bombay Government thus brought peace to its conscience; and although conditions have since gone from had to worse, nothing further has been done in the matter. At about the same time (1927) the Madras Government also appointed a Committee of inquiry. This Committee. like the Punjab Committee made various recommendations with a view to reorganizing the system of education in such a manner as to suit the requirements of agriculture and small industries. But even these recommendations have never been acted upon. Recently (1935) the United Provinces Goverument appointed another Committee to inquire into the problem of middle class unemployment. This Committee in order, it seems, to justify its existence, has presented a report of enormous dimensions; and, in a nutshell, all that it aims at conveying is that it is possible to solve the problem of middle class unemployment by such palliatives as the reorganization of education with a view to giving it a more practical bias, the reorganization and development of cottage and organized industries (they do not tell us how this miracle can be wrought without the direct intervention of the Central Government in the matter of tariff policy, transport policy and policy in relation to the development of basic industries) and the employment of educated youngmen on land as farm managers. We shall presently see that even if these recommendations are acted upon in toto, they would not bring us any nearer to the solution of middle class unemployment. As it is, however, the United Provinces Government has refused to act on the Report on grounds of financial stringency.

The question arises: have these inquiries served any useful purpose? They have: They have at least given us a rough idea of the magnitude of the problem, and shown that the Central and Provincial Governments, constituted as they are, cannot or would not do anything in the matter. It seems these inquiries were inspired not by economic but by political motives; and so long as political motives dominate governmental action, or inaction, in the economic field, we must not expect a lasting solution of the country's economic difficulties.

Reform of educational system: its limitations. There can be no manner of doubt that the plight in which the educated youngman finds himself to-day is due, to some extent, to the faulty system of education prevalent in India; but it is also equally obvious that conditions would not have been materially different even if we had the most up-to-date and scientifically planned and regulated system in force. It is said, and with con-

siderable justification, that although a purely literary type of education can ensure employment but to a select few, youngmen are compelled to go in for this kind of education in the vague expectation that something would turn up and because the country offers meagre facilities for education of more practical varieties. But even if our system of education had a more "practical bias", there would have been, under the existing economic organization, about the same number of educated unemployed in the country, because the suggested change in the system of education would not have by itself opened up new avenues of employment. A change, however sound and far-reaching, in the system of education would be, contrary to what is universally believed, worse than useless, unless that change is accompanied by an equally far-reaching change in the economic policy of the Government.

Palliatives as against true remedies A number of new avenues of employment have been suggested by the various Provincial Committees of Inquiry that have been set up during recent years, and of these cottage and factory industries, fruit culture and dairy farming are invariably hot favourites. We have already examined the possibilities of various cottage industries, and seen that very few of them have got a chance of prospering in the face of factory competition, and even those few only after they have been thoroughly reorganized and their products standardized on mass production lines. Such reorganization cannot take place without the active co-operation and participation of the State. Moreover, it will be necessary to stimulate the demand for the products of these modernized cottage industries. And the same organized or factory industries. In this field there are undoubtedly endless possibilities; but if all our hundreds of thousands of educated youngmen are to find employment in these industries, the pace of industrial pansion will have to be accelerated very considerably, and a demand for their products will have to be created. As regards fruit culture and dairy farming it may be said that under the prevailing circumstances the educated youngmen who take up

these industries will have to compete with those people who are content with only a few annas per day and who do all the manual work with their own hands. Success in certain circumstances (e.g. in the neighbourhood of large towns) is certainly possible, but then the opportunities are so restricted that any possibilities of a large number of educated youngmen being engaged in these industries seems to be out of the question. We have thus to fall back upon organized and cottage industries only, and even here success would depend upon certain well-defined conditions with regard to the demand for their products being fulfilled.

It follows, then, that the encouragement of cottage and organized industries and the development of fruit culture, dairy farming and kindred activities in a haphazard manner would at best reduce the gravity of the problem of middle class unemployment, and would not prove to be a solution of all our difficulties. The real remedy lies in an all round economic development, and this can be achieved only by planning and by directing the whole economic and social life of the country into scientifically planned and regulated channels. To begin with the present tendency to deal with the problems of the employment of educated and uneducated classes separately must be counteracted: it must be realized that the two classes stand and fall together, and therefore unemployment must be fought against as a whole. The second point to be realized is that the evil of unemployment will disappear only when the demand for and supply of labour (both soft-handed and hardhanded) are in a state of equilibrium, and this equilibrium can be reached by deliberately planning and organizing education on the one hand and production as a whole on the other. Economic planning itself would render it necessary to bring demand and supply in a state of equilibrium: for the development of manufacturing industries would be justified only when there is a demand for the products of those industries in the country, and this demand will depend on the purchasing power of the masses, which (considering that by far the greater proportion of India's population must for a long time depend upon agriculture) can be raised from its present low level by improving agriculture. In other words, in order to avoid lopsidedness, it will be necessary to develop all the various branches of production simultaneously—and this simultaneous and regulated development is the essence of planned economy. Needless to add, it would involve not only the control of actual productive operations, but also the control of the so-called vehicles of production, viz., credit, transport, etc. Again it will necessitate the manipulation of tariffs and the grant of State assistance in various direct and indirect forms. In short, every factor which has a direct or indirect bearing upon production will have to be controlled and regulated by the State.

The responsibility of the Central Government. economic planning must be on a national and not regional scale, as the resources and credit of the Provincial Covernments are after all limited, and moreover as the control of credit, railways, tariff policy etc., is in the hands of the Central Government, economic planning must proceed from the centre and not from the Provinces. In other words the problem of unemployment as a whole can be tackled only by the Central Government. But we have seen the attitude of the Government of India in the matter. So far it has not even realized its responsibilities; and the realization of responsibilities is the pre-requisite of all constructive action. Even the statistics have not yet been compiled -perhaps with the idea of keeping the country blissfully ignorant of the extent of unemployment. At the present time there is unemployment in almost every important country in the world (except of course Russia, which is the home of planned economy); but nowhere does it present itself in such alarming proportions as in India. And while in other countries the State has spent hundreds of millions of pounds in its efforts to solve the problem and to mitigate its evil effects, in India the Government has not so far spent a brass farthing.

CHAPTER XXV

THE NATIONAL DIVIDEND

The Meaning and Importance of National Dividend. "The national dividend is composed in the last resort of a number of objective services, some of which are rendered through commodities while others are rendered direct;"* in other words, it means the production of wealth per head in a country in the shape of goods and services. On account of the paucity of statistics available in this country, not to talk of their inaccuracy, it is not possible to work out the national dividend for India accurately, and in the nature of things a considerable element of conjecture enters into the calculation, and the estimates made by different people reveal a considerable variation. But one fact stands out in such a sharp and clear light that there are no two opinions about it; and from Lord Curzon and the Simon Commission on one side to nationalist opinion on the other, all our authorities are quite unanimous about the extreme poverty of the Indian people and the resulting poor national dividend for the country. As the Simon Commission remark, even if the most optimistic estimates are accepted, the result is that the average income per head in 1922 was equivalent, at the prevailing rate of exchange, to less than £8, while the corresponding figure for Great Britain was f.os. "The contrast remains startling even after allowing for the difference between the range of needs to be satisfied."† But as will be presently shown the contrast is in reality far more startling, and the very optimistic estimate of Mr. Findlay Shirras is rather arbitrary and unrelated to facts and can hardly be taken seriously. The question of the national dividend is the ultimate issue in the study of Indian economic problems because it reveals in a nutshell what is the

^{*} Pigon: The Economics of Welfare, p. 30.

[†] Simon Commission Report, Vol. I, para. 374.

real economic position of the country and is the conclusion of our study of the various economic problems.

Methods of Calculation. There are three principal methods which may be employed singly or in combination for estimating the national income and the national dividend: the income tax returns, the occupational census, and the census of production. We shall consider each of these methods separately. The income tax in India is paid by persons with an annual income of Rs. 2,000 or over; the number of persons who pay income tax in India is extremely small; and this method would not take us very far in estimating the national dividend. The second method is that of occupational census and it presents the difficulty that we cannot determine, with anything approaching accuracy, the incomes of a large number of inhabitants, as the statistics of subsidiary or secondary occupations, for example, are very imperfect and inaccurate. The third method is that of taking a census of production, and for this purpose the statistics of agricultural, mineral and factory production are fairly complete; but the statistics for several other items of production such as middlemen's profits, personal services, cottage industrics, transportation charges by means of the bullock cart and pack animals, fisheries, repair work etc. are very imperfect and a good deal of guess work is necessary. And on account of the ill-qualified agency which is employed for the purpose, the statistics collected are not very trustworthy. And in the permanently-settled areas even this imperfect agency for the collection of this statistical data is not available.

Various Estimates of National Dividend: Dadabhai Naoroji's Estimate. Various estimates of the national dividend in India have been made from time to time; and the first such estimate was made by Dadabhai Naoroji in his book Poverty and Un-British Rule in India. This estimate is based on official figures relating to the years 1867-70; and the method followed is by taking a census of production. Dadabhai Naoroji came to the conclusion that the per capita income for British India came to Rs. 20 per head, and he showed that the

jail dietaries and rations etc. for emigrant coolies proved that the amount needed for bare subsistence was Rs. 34. And he came to this conclusion: "Even for such food and clothing as a criminal obtains, there is hardly enough of production even in a good reason, leaving alone all little luxuries, all social and religious wants, all expenses of occasions of joy and sorrow, and any provision for a bad season." It is obvious of course that every poor labourer does not get his full share of the average production; and the capitalists, the zemindars, the officials, the merchants and the professional classes get vastly more than their share of the average production, thereby reducing the share of the mass of the people, who get appreciably less than the bare necessities of life. The chief objection raised against Dadabhai Naoroji's estimate was that since somehow people managed to exist and even multiply, they must have been getting the bare necessities sufficient for existence. To that objection his own explanation was that the capital resources of the country were being drawn upon and so the country was getting poorer and poorer. Dadabhai Naoroji excluded services in his computation on the ground that ultimately they were paid for from the material produce which was included in the estimate, and that the annual material production of the country is the one and only fountain head from which any individual can derive his share of the national income. There is some force in this argument but the practice of modern economists and statisticians is different and they think that there is a balance of advantage in not omitting every kind of immaterial service from consideration. It is true that the estimate of some services must necessarily introduce an uncertain and subjective element in an objective calculation; but that cannot be helped, and in any case the conjectural element in the Indian estimate is not by any means negligible. From the point of view of national wealth and welfare, services have the same significance as actual commodities; and while many human needs are satisfied by material commodities, there are others which are satisfied by various kinds of paid services. which must therefore be added to the material commodities in estimating the national dividend. One of the difficulties involved in comparing the different estimates of the national dividend in India is due to the absence of uniformity of method; and a fundamental agreement about the inclusion and exclusion of certain items would minimise the appreciable difference in the estimates by different authorities and facilitate the study of this crucial problem of Indian economics. Unhappily a certain amount of political prejudice enters into the calculation and all the official estimates are higher than the non-official estimates.

Other Estimates upto 1913-14. The next estimate of the Indian national income was undertaken by Major Evelyn Baring (later Earl Cromer) and Sir (then Mr.) David Barbour in 1882. According to their estimate the average annual income per head of population came to Rs. 27. The next estimate was made by Digby who proceeded on the assumption that the Government land-revenue bears a definite proportion to the total agricultural income, and on the basis of the 1901 census he came to the concluson that the per capita income would be Rs. 18-8-11 in a good year. For the famine year 1800-1000 Digby's calculation came to only Rs. 12-6-0. In 1900 Lord Curzon, in reply to Digby's estimate and other criticisms, proceeded to make his own calculation and came to the conclusion that the average income per head in India was Rs. 27 in 1880 and Rs. 30 in 1900. Even the most optimistic estimate by the great proconsul showed that the economic position of the country was not "very brilliant or gratifying." returned to the charge and showed that Lord Curzon's estimate was much too optimistic, and instead of accepting Lord Curzon's assumption that the non-agricultural income was equal to half the agricultural income, he examined in detail a large number of items and came to the conclusion that the average annual income per head was Rs. 17-4-0. According to Mr. F. J. Atkinson, the figure for the national dividend was Rs. 25 in 1875 and Rs. 34 in 1895. Messrs. Wadia and Joshi have worked out an estimate for the year 1913-14 and arrived at the figure of Rs. 44-5-6; and they have rightly made a deduction from the national income for home charges, investment of foreign capital on behalf of Government, profits on foreign capital invested in India, and remittances of money from India on private account by Government officers and non-official European employees in the country.

Post-War Estimates. Messrs. Shah and Khambata have made a careful and detailed study of the national dividend during the first quarter of this century; and their results are as follows:

For 1900-1914 ... Rs. 36.
For 1914-1922 ... Rs. 58½
For 1900-1922 ... Rs. 41½
For 1921-1922 ... Rs. 74

And making an adjustment for the change in the level of prices, they come to the conclusion that at the pre-war average price level, we get the figure of Rs. 36 per head for the pre-war period and Rs. 38-2-0 per head for the war and post-war period upto 1921-22. They make a number of deductions from the gross income on account of home charges etc. and come to the conclusion that the foreign drain takes away about Rs. 7 from the per capita income for 1921-22 reducing it to Rs 67. The estimate of Mr. Findlay Shirras for 1921 and 1922 comes to Rs. 107 and Rs. 116 respectively. But Mr. Shirras' estimate is vitiated by the fact that in estimating the agricultural income he makes no allowance for seeds, manure etc. It is obvious that in estimating the national production we must deduct from the gross production what is consumed in the process of production; and it is curious how Mr Shirras misses this simple consideration with the example of all his predecessors before him. Again, Mr. Shirras appreciably over-estimates the non-agricultural production of wealth in the country; and we are not inclined to take his estimate very seriously. The latest rough estimate is by Sir M. Visvesvaraya" who estimates the national income per head of population at Rs. 50 in 1934. We summarise below the various estimates in a tabular form.

Planned Economy for India, p. 175.

Authority for	r the estin	nate	The year to which it relates	Annu per hea		
				Rs.	A.	P.
Dadabhai Nac	proji		1870	20	0	D
Baring and Barba	aur	•••	1882	27	0	0
Digby	•••	1	1898-99	18	9	0
Lord Curzon	1	•••	1900	30	0	0
Digby	•••		1900	17	4	D
Atkinson	***	•••	{ 1875 { 1895	{ 25 34	0	D ()
Wadia and Joshi			1913-14	44	5	6
Shah and Khamb	hata		1021-22	67	ō	6
			1921	107	0	0
Findlay Shirras	•••	***	1922	1116	O	0
Sir M. Visvesvara (Rough estim			1934	50	D	0

Intensive Enquiries. Another method of approaching the same problem would be to select a few typical villages, to make an intensive study of the income of the villagers, and to work out the average income per head. This has been done by several investigators and the results generally corroborate the national estimates. For example, for the village Pimpla Soudagar, Dr. Harold Mann works out an income of Rs. 43-3-0 per head in 1917; and his study of another village in the Deccan, Jategaon Budruk, yielded similar results. Dr. Mann comes to the conclusion that out of 103 families investigated, only 36 or just under 35 per cent., can pay their way on the very low standard they themselves lay down. The others are living below that standard and obviously this reveals a very serious state of affairs. The various intensive studies conducted in Bengal, Punjab, Madras and elsewhere generally corroborate the position indicated above. We may therefore reasonably conclude that in spite of the conjectural element in the national dividend, the position as generally revealed is substantially correct, and the extreme poverty of the Indian people is a fact which is established beyond any doubt or dispute.

The Effect of Distribution of Wealth on the National Dividend. While the per capita income for the country is very low, it must be borne in mind that the income enjoyed by

the average person is appreciably reduced by the unequal distribution of the national income. It has been estimated by Messrs. Shah and Khambata* that more than a third of the annual production of the country is enjoyed by about one per cent. of the population, or, allowing for the dependents, about 5 per cent. at most; about 35 per cent. of the national production is consumed by a third of the population, allowing for dependents; and the remaining 60 per cent. of the people of British India enjoy about 30 per cent. of the annual produce in the country. And the state of things in the Indian States, which enjoy the doubtful luxury of indecently rich Rajas and Maharajas, is not likely to be better. It is therefore obvious that extremely low as is our national dividend, it is still further reduced by the gross inequalities of distribution. Besides, we must bear in mind that there is considerable inequality of distribution among the various provinces; and while Bombay, Sind, Punjab, Assam, Central Provinces and Berar, which grow commercial crops and are relatively more industrialized, are better off, Bihar, Orissa, the United Provinces and Madras are comparatively poorer provinces.

Interpretation of the Different Estimates of National Dividend. A glance at the table of the different estimates of our national dividend may at first sight leave the impression that low as our national dividend is, on the whole it shows a steady tendency to improve. But a little thought will dispel this pleasant illusion. Before we can make a comparative study of the condition of the people at different periods, we must take into consideration the fluctuations in the purchasing power of the rupee, because if the national dividend during a certain period has doubled and prices have doubled at the same time, the position is absolutely identical, though the number of rupees in which the national dividend is measured has doubled. Our instrument for measuring values is itself of a varying quality and due allowance must necessarily be made for it before arriv-

[•] Wealth and Taxable Capacity of India, p. 307.

ing at any conclusion. And from this point of view we invite the reader's attention to the estimate by Messrs. Shah and Khambata that at the pre-war average (1900 to 1914) price level. the national income per head was Rs. 36 during the pre-war period of 1900 to 1914, and Rs. 38-2-0 per head during the war and the post war period upto 1922. Recently owing to the catastrophic fall in agricultural prices the national dividend must have necessarily gone down more or less in proportion to the fall in the general price level. Another factor to be taken into consideration is that while some estimates relate to British India, others relate to the whole of India, and the latter on that account indicate a lower figure. And finally the methods ad pted in the different estimates are responsible for the differences; as for example, while Mr. Findlay Shirras does not make any deductions from the gross agricultural income for seeds, manure etc., Messrs. Shah and Khambata do not include services in their estimate of national production. The question of services would naturally raise the political issue whether some of the services in India are not considerably overpaid and it is impossible to arrive at a conclusion which will be universally accepted. Generally speaking it might be said that the latter valuations are on a more careful and scientific basis.

India's National Dividend compared with other Countries. We cannot properly understand and appreciate the very poor national dividend in this country without a comparison with other countries, as it is only against that background that we can clearly visualize the picture. In making this comparison for the purpose of finding out the welfare of the people in the different countries, a certain allowance must be made for differences in the standard of living, habits and customs. Broadly speaking, on account of its warmer climate the expenditure on food, clothing, housing and fuel which is indispensable in this country is appreciably smaller than in colder countries. But after every allowance has been made, the following table,

^{*} Planned Economy for India by Sir M. Visvesaraya, p. 176.

which shows the income per capita and the wealth per capita in India and the various other countries of the world, throws in a sharp relief the absolute poverty of India and the tremendous difference in her economic position as compared to the other countries.

National	Income	and	Wealth.
----------	--------	-----	---------

Country	Income per capita	Wealth per capita
Country	(Rs.)	(Rs)
U S. A.	2,053	9,365
Canada	1,268	8,023
United Kingdom	1,092	6,37 r
France	636	4,581
Japan	271	2,308
British India	82	441

These figures speak for themselves and further comment would be superfluous.

Indian National Dividend in terms of the Consumption of bare Necessities of Life. We may study the national dividend from a different but allied angle by studying the per capital consumption of the bare necessities of life and comparing it, not with the consumption of necessities (which to the Indian masses will appear as comforts and luxuries) in Western Europe and America, but with the consumption of the same commodities in India in the pre-war period. The following table is taken from a speech delivered by Mr. G. D. Birla at the annual session of the Federation of Indian Chambers of Commerce and Industry held at Delhi on 1st April, 1934.

Articles		Available supply for annual consumption per capita (1911-13 average)	Available supply for annual consumption per capita (1931-33 average)	
Total Food stu Mill-made cloth			376# lbs.	375 ₽ lbs.
and imported			12.35 yards	11.94 yards
Salt .			15∯ lbs.	12 lbs.
Sugar* .			14# lbs.	ı5∯ lbs.
Kerosene .			.55 gallons	.6 gallons
Post Cards .			1.4	1.3
Treasure .	.,		Import Rs. 1-2	Export Rs. 1—13

These figures speak for themselves. It will be observed that with the exception of kerosine and sugar, the per capita consumption of every necessity of life has gone done; and this in spite of the fact that the normal import of treasure has been converted into export of treasure. Under these circumstances it is fairly obvious that just at present the national dividend, low as it is, seems to be declining still further; and in this connection the crucial facts that we should bear in mind are that while these has been a great increase in the population and a catastrophic fall in agricultural prices, there has been no corresponding increase in the production of wealth.

Indian Poverty. The extreme poverty of India is a fact which is established beyond any doubt or dispute. Some official apologists† of the present regime, taking this to be an unjustified reflection on it, have tried to prove that in the pre-British period there was equally great or greater poverty. We have already indicated that we do not subscribe to this proposition, because the fundamental economic difference between the British regime and the pre-British regime is, that while under the former the

^{*} The figure is obtained by adding the imported sugar and converting the total available supply of gur into sugar on a 50 per cent. basis.

[†] Cf. "Poverty, as the economic history of pre-British rule shows, is not a modern phenomenon brought about in some mysterious way by British rule." Poverty and Kindred Economic Problems in India by G. Findlay Shirras, P. 9.

bulk of the people depend only upon agriculture, under the latter they depended upon agriculture and handicrafts; and the combined agricultural and industrial production of wealth per head was undoubtedly greater than the more or less purely agricultural production during the present regime has been. It is not disputed that in the pre-British regime India hardly imported any industrial products or exported any food or raw materials; on the contrary, there was a very considerable export trade in industrial products which made Sir Thomas Roe declare that "Europe bleedeth to enrich India." At present India pays for her requirements of industrial products out of her scanty agricultural produce per head of the population; in the pre-British regime she retained all her agricultural produce which, owing to a smaller population, was much larger per head of the population; produced all her industrial requirements; and by a considerable export of her industrial products she attracted and accumulated a vast store of precious metals present regime while the population in the country has increased tremendously, there has been no corresponding increase in the means of production, with the result that the very much overcrowded agriculture has been still further over-crowded, industries have totally failed in absorbing the vast increase in the population, the production of wealth per head of population has gone down, and poverty has increased With the dying out of her handicrafts under the combined influence of foreign rule and the industrial revolution in Britain, the springs of her prosperity were dried up; and the modern organised industries in the country have replaced the handicrafts to a very small extent indeed and they provide occupation for only a tiny fraction of the population. Owing to lack of space we cannot discuss this problem here in detail; but we have tried to bring out the main consideration which indicates that poverty in India under the British regime has increased.

But assuming for a moment that there was equally great or greater poverty under the pre-British regime, would that be sufficient to absolve the present regime from its responsibility for the abject poverty of the country and the vast majority of

its people? It is a commonplace of economics that the industrial revolution of the eighteenth century ushered in a new economic era in the world, which has resulted in increasing the production of wealth so tremendously that there can be absolutely no comparison between the period before the industrial revolution and the period after the industrial revolution. No serious student of economics with a reputation for sanity to maintain would venture on such a comparison in the case of Europe or America; and yet it is precisely such a comparison that is made by some official apologists in the case of India. Such a comparison appears to us to be utterly disingenious; and at the best it can only prove, what nobody disputes, that by means of machinery and power more wealth can be produced than without them. And if machinery and power have been introduced into this country to a very small extent, the laissaiz faire policy of the government has been responsible for it in no small measure. A preliminary step for the ultimate solution of the very difficult and complex problem of Indian poverty is to face squarely the realities of the situation; and it must be admitted that the present regime has had a very sorry record in the economic sphere during the more than a century and a half in which it has guided the destinies of this country

In the preceding pages we have discussed in some detail the many serious, difficult and complex problems which must be solved before the problem of poverty in India can be seriously tackled; and not the least important among them is a social revolution which is long overdue. It must be confessed that at the present rate of progress the problem will never be solved; and we must also confess that we see no immediate prospect in sight for its solution. Ultimately we are convinced that the problem can only be seriously tackled by adopting and vigorously pursuing a policy of planned economy for the country as a whole. Such a policy pre-supposes a hearty and enthusiastic co-operation between the people and the government. We have no desire, nor are we competent, to discuss the present political

situation in the country; but this much is obvious to even a casual observer that there are no signs visible of any such hearty and enthusiastic co-operation between the people and the government. The economic history of many countries shows that until the political problem has been solved and put out of the way, the economic problem has not been, and in the nature of things could not be, effectively tackled. We venture to think that the same will prove to be the case in India; and as at present the solution of the political problem is not in sight, the solution of the economic problem lies further afield. But we may derive what comfort we can from the fact that the tempo of economic progress during the present century is such that a decade or so can bring out such vast changes in the economic life and the general outlook of the people that they may be justly described as revolutionary. And another comforting fact is that the old laissaiz faire policy of the Government, under which it sat with folded hands while the handicrafts, which were the life blood of the country, were ruined and agriculture was wallowing in stagnation, has been officially given up; though we do not see at present any pursuit of an active, wellplanned, and co-ordinated policy for tackling seriously the many economic problems in the country. In the preceding pages we have made it abundantly clear that, in our opinion, the problem of Indian poverty cannot be seriously tackled by attacking the problems of agriculture alone; and while the present Viceroy has given some evidence of his interest in agriculture, we have not seen any evidence that he realizes that even the problems of agriculture in India cannot be tackled without a policy which tackles the problems of industry seriously and simultaneously. Meantime it is something to the good that both the Government and the Congress, which is the strongest political party in the country, are beginning to realize that the peasant occupies the centre of the picture in India; and the more we concentrate on his pathetic figure, hungry and poverty stricken, illiterate and ill-clad, diseased and dirty, living in a hovel, and the helpless victim equally of his own superstitions and oppressive social conventions, and the money-lender, the zeminder, and the revenue official—the more we concentrate on this typical and representative Indian figure, the nearer we shall be to the solution of Indian poverty, which is far and away the most crucial problem which faces our country.

Accounts, balance of, 657-59. Acworth Committee, 397, 402, 403, 404, 409, 413. Afghan war, 578. Agriculture : general survey of principle crops and exports, Chap. V. -place of in Indian economy, 86-87. --low yield of, 99-100. -the problems of land, Chap. VI. -- the State in relation to, 122. -State assistance to, 125-26. Agricultural Commission, 103, 108, 112, 118, 119, 123, 128-29, 227, 233. Agricultural credit, supply of, 566. Agricultural Credit Department of Reserve Bank, 566. Agricultural departments, handicaps of, 123-25. Agricultural ilevelopment as remedy for over-population, 56. Agricultural implements, supply of, Agricultural incomes, taxation of, 620. Agricultural labourer, 160-61. Agricultural marketing, 174 st seq. Agricultural produce, exports of, 100-102. Agricultural propaganda, 159-60. Agricultural Relief Acts, 193 ct seq. Agricultural statistics of British India, 87-89. -analysis of, 89-90. All-India Trade Union Congress, 366. Aluminium, 268. Animals in India, 14.

Animal husbandry, 168 et seq. Apex Banks, 216, 217-18. Area of India, 2-3. Assessment, principles of, 149-50. Associated Chambers of Commerce, 679. Atkinson, Mr. F. J., 708, 710. Babington-Smith Committee, 463. 464, 503, 504. Banking and Credit organization, Chapter XX. Banking facilities, extension 564-65. Banking Enquiry Committee, 56, 134, 217, 561, 562. Bankers, indigenous, 528, et seq. Banks, early European-managed, 531-32. -Foreign Exchange, 542 st seq. -Indian Joint-Stock, 537 et seq. -Land mortgage, 546 et seq. -Postal Savings, 548-49. -Presidency, 531-32. -Govt. relations with, 532-33. -restrictions on business of. 533-34. -Scheduled, 554. Barbour, Sir David, 708, 710. Baring, Major Evelyn, 708, 710. Barker, Mr. J. E., 124. Basic industries, 252 et seq. 275 et seq. Bauxite, deposits of, 9, 11. -production of, 9. Bengal Iron Co., 253. Bimetallism, 424-25, Birla, Mr. G. D. 713.

Birth Control, 56-57, 59-60.

Birtli rate, 42-44. · high, consequences of, 43-44. Blacker, Mr. C. P. 60. Bombay Improvement Trust, 358. Brassware, manufacture of, 240. Btayne, Mr. F. L. 127. Breweries, 301. Brij Narain, 101. British Textile Delegation, 684 Broadcasting, 584. Budget, Supplementary, see Supplementary Finance Bill. Budgetry position, 578. -- deficits, 579. Burma, imigration to, 55. -nineral deposits in 4, 8, 9, 10,

Colvert, Mr. 112.
Capital, amount of, invested in industry, 312-14.

-amount of, available for industry, 315-17.

-causes of the supremacy of foreign, 314-15.

-difficulties of raising, 317-18.
Carpet manufacture, 240 et seq.
Caste System, origin and extent of, 18-19.

-advantages of, 19-20.

-disadvantages of, 20-21.

-present position of, 21-22.

Cattle-breeding, 171-72.

Cement industry, 250, 292 of seq.

Central Banking Inquiry Committee, 233.

-Central Government, finances of, 580 et seg.

-revenues of, 587 et seq.

Ceremonial expenditure, 25-26.
Ceylon, emigration of Indians to,
54.

Chamberlain Commission, 445, 452, 501-02.

Chemicals and drugs, 647. Chemical industry, 269 st seq. Child Marriage Restraint Act, 50. Chopra Col. 47.
Chromite, 9, 11.
Civil disobedience movement, 602.
Clays, 11.
Climate of India, 4.
—and productive efficiency, 4.
Clouston, Dr. 86, 102
Coal, 10, 11, 264.
—Zone, 310-11.
Coal mining, 250, 264.
—industry, 265 et seq
—methods of, 265.

Coastal and oceanic shipping, 413 et seq.

Coastal shipping, reservation of, 416-17.

Coffee, 14, 94.

Coinage, standardization of, 418 et seq.

Commercial Intelligence, 631-33.
Communication, rural, 159.
Concibation boards. 190 et seq.
Congress, Indian National, 717.
Contraception as a remedy for overpopulation, 57-59.

Co-operation, aims and objects of, 200, 201, 202.

Co-operative apex banks, all-India, 217-18.

Co-operative better living societies, 224-25.

Co-operative Central banks, 212 ct seq.

Co-operative Consolidation of land holdings, 222-23.

Co-operative Consumers societies, 224.

Co-operative Credit, 205-06, 546 et seq.

Co-operative Societies Acts, 202, 203, 204.

Co-operative educational societies, 226-27.

Co-operative fruit plantation societies, 229.

Co-operative housing societies, 227.

Co-operative industrial societies, 227.

721

Co-operative irrigation and land Debt redemption, 604, 615, 616. reclamation, 223-24. Co-operative labour contract societies, 228. Co-operative life insurance, 228. Co-operative marketing, 220 et seq. Co-operative Movement in India.

Chap. X.

-achievements of, 235-36. - estimates of, 229-30.

-extent of, 230-31.

-handicaps of, 231 et seq.

-landmarks in, 204-05

-weakness of, 232 ct seq.

-Provincial Banks, 215 et seq.

-Unions, 212-13.

Copper, 268, 647, 648.

-ore, 8, 12.

Cottage Industries, Chap. XI.

-causes of survival, 243. case for development of, 243-44. --organization of, 242-43.

-scope for, 244-45.

Cotton, 94-96.

-Spinning and Pressing Factories Act. 96

-manufactures, 646.

-Markets Act, 96.

-mills, 250, 277 ct scq.

-production of, 95.

-- Transport Act, 96.

Credit facilities, adequacy of, 565-66 Crops, 90 et seg.

Cultivation, methods of, 163-64.

Currency and Exchange, Chapters

XVII and XVIII

-effects of war on, 456 et seq. -and mint, revenues from, 599.

-reserves, unification of, 481.

Curzon, Lord, 122, 705, 708, 710. Customs duties, 588 et seq.

Cutlery industry, 301.

Dacca muslins, 238, 239. Darling, Mr. M. L. 112, 179, 185. Datta Committee, 517, 518, 519, 520 Death rate, 42 et seq.

-services, 604, 614-15. Defence services, income from, 600. Deferred rebates, 416-17. Digby Mr., 708, 710. District Boards Finance, 623 et seq. Drain, 659 et seg. Dutt, Mr. R. C. 75, 117. Dve industry, 240.

Rarly marriage, consequences of, 50 India Company, industrial Ra-t policy of, 331.

Transition Economic in India, Chap. IV.

Education system, reform of, 701-02. Flectricity, importance of, 308.

Electrification, necessity of, 309.

-means and niethods of, 308-09. Emigration, as a remedy for overpopulation, 54-55.

Encumbered Estates Act, 195-96. Isngineering industry, 270 et seq.

-- absence, causes of, 270-71.

-consequences of, 271.

Engineering works, location of, 270.

Excise duties, 592 et seq. 602-03.

-countervailing, 599-600.

Expectation of life in India and abroad, 46-47.

Expenditure, on various services, 608 et seq.

-growth of, 607-08.

- criticism of, 609 et seq.

Export duties, 592 ct seg.

External Capital Committee, 326.

Pactory system, causes of late developnient, 249.

--progress of, 250.

Families, size of, 52. I'mines, 694 et seq.

Farquhar, Mr. 249.

Fatalism, as cause of backwardness. 28-29.

Federal Finance Committee, 619. Federation of Indian Chambers of Commerce, 678, 683.

I'erro-manganese, exports and production of, 256.

Fertility of Indian women, 51 Finance Bill, supplementary, 581,82, 591.

Finance and management, 312 et seq.

Finance, importance and scope of, 312.

-Provincial, 586 et seq.

-under the new constitution, 616 et seq.

Financial relations between Central and Provincial Governments, 569 et seq.

-under Reformed Constitution, 572 ct seq.

--hystem, defects in, 574, et seq. Finances of the Central Government, 578 et seq., 580.

Financing agencies, Co-operative, 212.

Fiscal Commission, 257, 325, 338, 339, 340.

Fisheries, 14.

Flora and fauna of India, 14. Fodder, supply of 170 et seq.

-crops, 14, 99.

Foreign capital, employment of, 324-325.

—disadvantages of employing, 325, 327.

--advantages of, 325-26.

-control of, 328.

Forests, 12.

-utility of, 13.

-as sources of revenue, 604.

-products, output of, 13.

Forest Research Institute, 13.

Fowler Committee, 430 et seq.

-recommendations of, 435 et seq.

-scheme, abandonment of, 439 et seq.

Gadgil Mr. D. R. 75. Gandhi, Mahatma, 127, 240, 243, 247. Glass industry, 294-95. Gold, deposits of, 9.

-Bullion standard, 473 et seq., 477 et seq.

-Checks on purchase of, 481.

-demonitization of, 420-21.

-Exchange standard, evolution of, 418 el seq.

-conditions of working, 450-51.

-breakdown of, 456 ct seq.

-main features of, 446-47.

-exports of, 496-97, 657.

--movement in favour of return to, 421-22.

-- purchase of, by Government, 497-98.

-- savings certificates, 479-80.

Haji, Mr S N., 417.

Handierafts, decline of, 238-39

-case for development of, 243-44.

- financing of, 66-67.

means and methods of improving, 245 ct seq.

-present position of, 239 et seq. -persons employed in, 242.

- scope for development of, 244-245.

Hand-loom weaving, 240.

Harbours, 15.

Heath, Josiah Mershall, 250. Herschell Committee, 425 et seq.

—recommendations of, 428-29.

Hides and skins, 648.

Hilton Young Commission, appointment of, 473.

-on defects of gold exchange standard, 473-74.

-on gold standard, 476-77.

-on gold bullion standard, 477-78.

-on Paper Currency, 506-07.

-on Reserve Bank, 482-83.

—on stabilization of rupes, 483-484. Hilton Young Commission, on 1s. ed. ratio 484 et seq. Hosiery industry, 301.

Hydro-electric power, 15.

-necessity of developing, 267.

-present position of, 266.

-potentialities of, 266.

-survey, 266.

Imperial Bank of India, 491, 555-56, 559, 561, 562.

Imperial chemical industries, 270. Imperial cattle-breeding farm, 123. Imperial Council of Agricultural

Research, 129-31.

Animal of Institute Imperial Husbandry, 123.

Imperial Institute of Veterinary Research, 123.

Imperial Preference, 666-67.

Breeding sugar-cane Imperial Station, 123.

Import duties, 591 et seq.

inchcape, Lord, 578.

Income tax, 593 et seq.

Index numbers, Indian, 466.

-U. S. A. 466.

Indian agriculturist, backwardness of. 156-57.

Indian Central Cotton Committee, 95. 96

Indian Merchants' Chamber, 633. Indian Chambers of Commerce and Industry, 713.

Indigo, 98.

Indo-British Textile Agreement, 283, et scq

Indo-British Trade Agreement, 96, 680 et seg.

-principal clauses of, 680-82. Review of, 682 et seq.

Indo-Japanese Trade Agreement, 96, 679, 686.

-genesis of, 686-87.

-- clauses of, 687 et seq.

- basis of, 689-90.

. working of, 690.

Industrial banks, 322 et seq. Industrial Commission, Indian, 73,

266, 334, 335, 336.

Industrial development, as a remedy for overpopulation, 56.

-Factors in, Chap. XIV.

Industrial leathers, 274.

Industrial policy, 333.

Industry, modern, beginning of, 81-82.

-progress of, 82-84.

Inheritance and Succession laws, 24-

Industrial Revolution, as the basis of economic classification, 66; importance of, 65; in England consequences of, 75-76.

Interest, on loans, 600.

-charges, justification of, 619.

Iron and steel, industry, 238, 240, 250, 253, 254, 255.

-imports of, 256.

--production of, 255.

Iron ore, 8, 11.

Irrigation, revenue from, 602; problems of, 112-14; productive and unproductive works, 114; policy of Government, 115-16; new works, 116-17; versus railways, 117-18; canal, evil consequences of, 118; versus navigation, 413.

Irvine Lord, 105.

Joint family system, advantages of, 23; disadvantages of, 23-24; meaning of, 22-23; present position of, 24.

Jute, 96-97, 647.

-cultivation of, 96.

- exports of, 289.

-goods, 289.

-industry, 82, 288 et seq.

-mills, 250.

-yarn, 648.

Kaji, Prof., 222. Kale, Prof. V. J. 83. Khadi movement, 240.

Labour, as factor in production, 349-350.

-Commission, see Whitley Commission.

-conditions of work of, 358-59.

-efficiency of, 368 et seq.

-hours of work of, 359-60.

-housing of, 357-58.

—industrial, its estimated strength, 351-52.

—in organized industries, Chapter XV.

-mental equipment of, 355-56.

-methods of recruitment, 354.

-methods of payment, 360 st seq.

-of foreman class, 354-55.

-standard of living of, 356-57.

-supply, sources of, 352-53.

Land alienation, restrictions on, 187.

—mortgage banks, necessity of,
218-19.

-working of, 219-20.

-revenue, 131-32, 143 et seq., 151-152, 153, 154, 600 et seq.

-tenures, 131 et seq.

-types of, 132-33.

Lead, production of, 268.

ore, 8, 12, 268.

Leather tanning industry, 240, 272 et seq.

I,indsey, A. M., 432, 433.

Livestock, number of, 169

-diseases of, 172 et seq.

Local Board Finance, 623-24.

-defects in, 624-25.

Local Finance, 621 et seq.

Machinery, 647.

Maclagan Committee, 206, 209, 212, 213, 217.

Magnisite, deposits of, 11.

Magnisite, production of, 11.

Mahalwari settlement, 140 st seq.

Malaya, emigration of Indians to, 54.

Malaria, economic consequences of, 47.

Malnutrition, consequences of, 47-48.

Manganese ore, 9.

Managing agency system, 318 et seq.

Mann, Mr. Harold, 105, 106.

Manufacturing industries, present condition of, 302 et seq.; causes of slow progress of, 304-05.

Mansfield Commission, 422.

Manuring, problem of, 164 et seq.

Marriage rate, 48, 57.

Match industry, 295.

Matches, excise on, 619.

Maternity Benefit Acts, 363 et seq.

Mcgaw, Sir John, 47-48.

Mercantile Marine Committee, 415, 416, 417.

Meston award, 573, 574.

Metals, non-ferrous, 268-69.

Metalliferrous minerals, 8-10.

Mica deposits, 11.

Migration, inter-provincial, 55.

Mineral resources, 8-12.

Mody, Mr. H. P., 687.

Mody-Clare-Lees agreement, 684

rt seq.

-clauses of, 684.

—history of, 684.

—scrutiny of, 685.

Money-lenders, activities of, 181-82.

Money market, organization of, 560 et seq.

Montague-Chelmsford reforms, 576.

Moreland, Mr. 72.

Morrison, Sir J., 66.

Motte and Farquhar, 249.

Mukerji, Radha Kamal, 147.

Municipal Finance, 621,22.

-defects in, 622-23.

Munitions Board, Indian, 33.

Mysore Iron Works, 255.

Naoroji, Dadabhai, 708. National Dividend, Chap. xxv.

-enquiries on, 710.

- -effects of distribution of wealth on, 710-11.
- —Indian, compared with other countries, 712-13.
- —interpretation of different estimates, 711-12.
- enquiries on, 710.
- -meaning and importance of, 705 et seq.
- -methods of ralculation, 706.
- -post-war estimates of, 709.
- -various estimates of, 706-07. Natural divisions of India, 3-4.

Natural Resources, Chap I.

-importance of, 1-2.

Nickel ore, deposits of, 9.

-production of, 10.

Niemeyer, Sir Otto, 617, 618, 619. Non-Basic industries, Chap. XIII.

Occupancy rights, 136-137.
Oilcake, 272
Oilseeds, 14, 97-98.
Opium, 14, 98.

-duty on, 596-97.

Organized Industries, Chaps. XII & XIII

-extent of, 251-52.

- —number of persons employed in,
- -- financing of, 567
- -and Joint Stock Banks, 567

()ttawa agreement, 666 et seq. 683.

- -advantages and disadvantages of, 675 et seq.
- -background of, 667-68.
- -imports under, 673 et seq.
- --principal clauses of, 669-70.
- -working of, 670 et seq.

Overpopulation, causes and magnitude of, 52-54.

- remedies for, 54 et seq

Paint and varnish industry, 302.
Paper Currency, 498 st seq.

Act of 1861, 498-99.

- —and Babington-Smith Committee, 503-04.
- -and Chamberlain Commission, 501.
 - -defects of, 499-50Q.
- -during the war, 501 et seq.
- —and Hilton Young Commission, 506-07
- -Reserve, Composition of, 508 et seq.
- -System, changes in, 500-01.

Paper industry, 290 et seq.

Pathan money-lender, 183.

Permanent improvements on land, 120-21

Permanent Settlement, 139-40, 146, 147, 148.

Petroleum, deposits of, 10.

Phipps, Mr. H P, 122.

l'ig iron, 256

I'liny, 634

Population of India, 3, 9-10.

- -Problems of, Chap. III.
- -density of, 30-31.
- -distribution of, 31 et seq.
- statistics and variations of, 32.

Post Office Savings Banks, 561.

Posts and Telegraphs, revenues from, 598

l'overty, Indian, 714 et seq.

Power, sources of, 15-16.

- -supply, 308 et seq.
- —development of and state, 311-12

Preferential trade, economics of,

Price movements, Chap. XIX.

Price uniformity, movement towards, 514-15.

Price movements before the war, 515-16.

Prices, fall in, 525.

-consequences of fall in, 525 et seq.

Prices, during trade depression Railway finance, attministration of, period, 524-25.

-rise in, 517-16.

-during the war, 521 et seq.

-effects of, 523 st seq.

Primary agricultural societies, 206-207.

-overdues of, 209-10.

-working capital of, 207-08.

Primary non-agricultural societies. 210 et seg.

Probyn, Lesley, 433-34.

Production of wealth, as a remedy for overpopulation, 56.

Prohibition, 603.

Provincial Banks (Co-operative), 215 et seg.

-revenues, 600 et seq.

Public debt, 610 et seg.

-growth of, 613-14.

Public expenditure, 607 st seq.

-criticism of, 609 et seq.

--growth of, 607-08.

Public Finance, Chap. XXI.

-evolution of, in India, 569 et seq.

l'ublic health, 47-48, 157-58.

Pusa Agricultural Research Institute, 123, 584.

Rail-Road co-ordination, 410 et seq. Railways, 14, 394 et seq.

-as a source of revenue, 597-98.

-capital investment in, 397-98.

-during and after the war, 396-97.

-management and control of, 401 et seq., 408.

-pre-war development of, 394 et seq.

-scope for development of, 400-01.

-rates policy of, 406-07.

-under the new constitution, 409.

Railway development, consequences of, 398 et seq.

403-4.

-recent tendencies in, 464 et seq.

Rainfall in India, 4-5.

Ramade, Justice, 72, 81, 83.

Raw materials, 306 et seq.

Registration, 603-04.

Regulation of Sales Act, 197.

Research Committees, provincial, 131

Reserve Bank Act, 508.

Reserve Bank, and joint stock banks, 564.

-and other banks, 565.

-agricultural credit department of, 566.

-as a co-ordinating agency, 563-

--establishment of, 482-83, 506-07.

Reserves, unification of, 480-81.

Retrenchment Committee, 578-79.

Revenues, of Central Government. 587 et seg.

-of Provincial Governments, 589. 600 et seq.

-- possible new sources of, 619 et seq.

Roads, 15, 328, 383.

-Board, 387.

-construction policy, 386-87.

-development committee, 387, 388.

-development fund, 584.

-inadequacy of, 385-86.

-mileage, 384.

-policy, 388-89.

-problem and its solution, 389 et seq.

-transport, 384, 385, 392 et seq.

Roe, Sir Thomas, 715.

Roy, Dr. Parimal, 636.

Rubber, 14, 99.

Rupee, future of, 511 st seq.

Rural credit, 187-88.

Rural indebtedness, Chap. IX. Simon Commission, 705. -problem of, 179. Sind, emigration to, 55. --- causes of, 180-81. Slater, Prof. Gilbert, 232. Smith, Mr. V. A., 383. -extent of, 180. Soap industry, 302. -measures against, 185. Rural development, 584. Social and Religious Institutions, Rural uplift, 127-28. Chap. II. Ryotwari Settlement, 142-43. Soils, alluvial, 6. Ryotwari tracts, tenant rights in, —black cotton, 6-7 137 -laterite, 6 -red, 7. -deterioration of, 102. Sources of revenue, allocation of, Sales Societies, 221 616 et seq. Salt tax, 595 et seq. Spices, 14. Salter, Mr., 261 Spirituality, as a cause of back-Samaldas, Sir Lalubhai, 222. wardness, 26-28. Sand, deposits and production of, Stabilization of rupee, 483-84. Stamp duties, 603. Sarda Act and marriage rate, 57. State-action, meaning and scope of, Scheduled taxes, 604. 329-30. Schwartz, Ritter Von, 253 - lines of, 344 et seq. Seasons in India, 5-6 State intervention, methods of, in Seeds, 647. financing industry, 321-22. Settlement, land, 137 et seg Steel industry, future of, 262-63. Shah, Prof K T, 629 -protection of, 257 et seq. Shah and Khambata, 712. Sterling exchange standard, 492-94. Shaw, Mr G B, 57, 61 n —consequences of, 495-97. Shawl industry, 240 - defects of, 495. Ship building industry, 239. - merits of, 494-95. Shipping, coastal and oceanic, 413 | Sterling purchase system, 471-72. Strickland, Mr., 109, 112. causes of backwardness, 414-15. Sub-division and fragmentation of conference, 414, 415 holdings, 104-05. -coastal, present position of, 413--causes of, 106-07. 14 evil consequences of, 107-08. -extent of, 105-06 Shirras, Mr Findlay, 705, 709, 710. Silk industry, 240, 287-88. -remedies for, 109 et seq. Silk goods, imports of, 287 Sub-proprietory rights, 134-35. Silk mills, 250. Succession duties, 620. Silver, arguments against return to, | Sugar, 646. 431 et seq. -Bureau, 123. -decline in value of, 422-23. -Cane, 14. -demonstration of, 429.30. -Committee, 296. -effects of rise in price of, 458-59. -duty on, 299. -slump, effects of, 423. -industry, 296 et seq. -standard, agitation against, 423-Sulphur, 10, 12, 270.

Swedish Match Trust, 295, 296.

24

Tank irrigation, 119-20. Tariff Board, on Cement, 293.

- -on cotton, 281.
- -on glass, 294.
- -on paper, 291.
- -on sugar, 298.
- -on steel, 258 st seq.
 - -on sugar, 298.

Tata Iron and Steel Company, 250, 254 et seq.

Taxes, on advertisement, 577.

- -on amusement, 577.
- -on betting, 577.
- -on succession, 577
- -Terminal, 620.

Taxation, burden of, 604-05

- -system, drawbacks of, 605-07.
- -new sources of, 577.
- -Inquiry Committee, 150, 151, 152.
- residuary powers to impose, 577.

Tea, 14, 93-94, 647.

—industry an'l emigration o labour, 55.

Temporary Settlement, 146-48 Thomas, Dr P. J, 190

Thakurdas, Sir Purushotamdas, 468-

Tin Ore, 9, 12, 268

Tobacco, 14, 99, 100.

- -excise on, 619.
- -tax. tion of, 620.

Towns, in India, 84-85.

- -decay of handicrafts in, 85.
- -expansion of, 85.
- —number of, 84.
- -population of, 84.

Trade, Chap. XXII.

Trade Agreements, Chap. XXIII.
Trade centres, Indian, 630-31.
Trade belonce of \$554.55

- Trade, balance of, 654-55 —coastal, 627-28.
 - -direction of, 648 et seg.
 - -Entrepot, 653-54.
 - -foreign, 633 et seq.

Trade features of India, 644 et seq., 654-65.

- —fluctuations in volume of, 6436
- -inland, 629-30.
- -international, 626 et seq.
 - -history of, 633-36
 - -importance of, 626.
- —in modern times, 636 et seq & —Journal, Indian, 632.
- -Land Frontier, 661 et scq
- -Union movement, 365 et seq.

Transport, 14, 15, Chap. XVI

- -- different means of, 381-82
- -requisites of an efficient system'
- -toad, 382-83
- —social and economic importance of, 380.

Treasures, movement of, 654 et seq. Tributes from Indian States, 599 Tungston ore, 9, 11

Unemployment, Chap XXIV

- -among educated classes, 697-98.
- -among skilled workmen, 693
- —government inquiries on, 699
 - -responsibility for, 704
- -rural, 693-94.
- -remedies for, 702 et seq.
- -varieties and causes of, 691

Unions of Primary Societies, 212-13.

U. S. A. emigration to, 54. Utensils, manufacture of, 240.

Vegetable oil, production of, 272

- -industry, 271 et seq.
 - -possibilities of, 272

Village constitution, types of, 133-34.

Village Industries Association, 247.
Vivesvaraya, Sir M, 100, 708, 710.
Voelcker, Dr., 102

adia and Joshi, 708, 710

pter power, see hydro-electric
power

-/one, 310

aterways 15, 412 et seq

-possibilities of, 412

-varieties and advantages of, 412

ttal, Mr P K, 40, 44 n, 45 n

46 n, 47, 48

Ifare work, 362 et seq

11 irrigation, 118-19

Atily Commission, 211, 350, 354,

355, 356, 359, 362, 363, 364,

365, 667 369, 378, 687

Is m Sir G F, 86

Wolff, Mi Harry, 207
Woodwork, 240
Woollen goods, imports of, 287
Woollen industry, 286-87
Woollen initis, 250
Workmen's Compensation Acts, 363
et seq

7emindar, 161-62

/emindari Scitlement, 139-40

/emindari tracts, tenant rights in,
135-36

7inc, 268

-ore, 8, 12